ESCUELA DE NEGOCIOS
Universidad Torcuato Di Tella

CIF

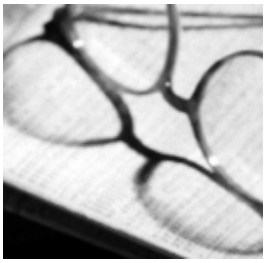
Centro de Investigación en Finanzas

Documento de Trabajo 10/2002

Defaults in the 90´s: Factbook and Preliminary Lessons

Federico Sturzenegger
Universidad Torcuato Di Tella






Miñones 2177, C1428ATG Buenos Aires • Tel: 4784.0080 interno 181 y 4787.9394 • Web site: www.utdt.edu/departamentos/empresarial/cif/cif.htm

Default Episodes in the 90s: *Factbook* and Preliminary Lessons[1]

Federico Sturzenegger
Business School, Universidad Torcuato Di Tella

June 2002

[1] I want to thank Miguel Broda, Daniel Heyman, Brian Pinto, Alfonso Prat-Gay and seminar participants at BCRA, CARI and Universidad Di Tella for useful comments. I also want to thank Rodolfo Campos, Josefina Rouillet, Iliana Reggio and, particularly, Pablo Datria and Luciana Esquerro for valuable research assistance. The usual caveat applies. This paper has been prepared for the World Bank.

I. Introduction

A national debt, if it is not excessive, will be to us a national blessing
Alexander Hamilton, 1781

Since the Tequila crisis in 1994, and particularly after the succession of crises in Asia and the default episode in Russia, questions related to international sovereign bond restructuring have been increasingly at the forefront of policy discussions in emerging economies. Concepts like crisis prevention and resolution, international financial architecture, moral hazard risks and private sector involvement have been discussed profusely in the context of each new default episode. While these questions, key to the international financial community, have received much deserved attention, the discussion has been one-sided, focusing on the role of the international financial institutions (IFIs) and of G-7 countries. The debate within emerging economies as to how to react and as to what can be learnt from previous default experiences has received much less attention.

In the current context in which medium-term syndicated loans have been largely replaced by bond issues as the main source of sovereign (and private) foreign borrowing, questions specifically related to debt renegotiation mechanisms and debt exchanges, and the associated legal issues aimed at reducing the obstacles imposed by the presence of vulture investors, have become crucial determinants of the length and success of the renegotiation process. However, given the novelty of most of these issues (in spite of a long history of debt defaults), lessons from each episode have been accumulating in a somewhat fragmentary way as new cases develop. To document these experiences, describe the new instruments, and to understand the differences between the recent experiences is the objective of this paper.

Defaults are part of the natural cycle of economic activity, and there are plenty in a thriving market economy. Thus, legal systems have developed well-oiled legal procedures to deal with such occurrences at a minimal social and private cost. There is of course a vast literature on this issue, both in economics and in law, discussing the merits of different bankruptcy procedures. The default experiences that we discuss in this paper are not defaults that occur within a single legal framework, but between residents of different countries, usually involving a sovereign debtor. Sovereign lending has always been a class of its own. Take as a starter what was known as the principle of sovereign immunity. Under this principle, sovereigns could not be sued in foreign courts without their consent. If so, in the event of default, unless the aggrieved counter-party could persuade its own government to apply overt pressure, it was left alone or forced to pursue the case in the defaulting country courts.[2] While this principle has been greatly restricted in recent times sovereign

[2] In 1952 the US began to apply a more restrictive theory of sovereign immunity under which foreign sovereigns were denied immunity for commercial activities carried on outside the sovereign's own territory. It was eventually codified in the Foreign Sovereign Immunities Act of 1976, which allows for suing a foreign government in local courts, if the complaint relates to commercial business including debt defaults. See Buchheit (1995 and 1997).

lending has historically been subject to greater uncertainty than that corresponding to regular lending within each country.[3]

In spite of this, cross border sovereign lending has been an essential feature of international financial markets since last century, when international capital markets first blossomed. However, this lending has been characterized by continuous cycles of boom and bust. In general, the bust cycles entailed long and protracted restructurings, which eventually were very costly both to bondholders and defaulting debtors. Therefore, during the 70s, lending to developing nations was intermediated through banks, which were supposedly better informed to make prudent decisions. The intervention of banks was seen as an institutional response to the chaotic lending cycles of yesteryear. However, even they could not avoid a massive collapse of the payment system and a new long cycle of restricted access to capital flows just a few years later.

When capital flows resumed during the 90s it was led by independent and atomized bondholders, rather than by a consortium of banks. However the fear of default and of a possible collapse of international markets for another decade, as well as the perception of a substantial fragility of the system, loomed like an impending storm on the horizon. Such was the fear with the possibility of defaults that both multilateral institutions and the US Treasury were fast to offer substantial resources upon any potential problem. Such was the position taken regarding the Mexican Tequila crisis, and its sequels in Argentina and Brazil. The massive crises in Korea, Indonesia and other Asian economies, received equally benevolent treatment. Anything went, least to let the virus of default go loose.

Of course, this policy did not go free of detractors. Main critics underscored the risk of moral hazard, which would lead to increasing instability in international financial markets. This problem turned real when the IMF realized that it had gone too far in aiding an ailing Russian government. The fierce criticism received by the Fund as a result of its eventually unsuccessful aid to the Russian program led to a quick reversal of position. In many of the ensuing crises the Fund opted for a hands-off approach, securing an increase in private sector involvement (PSI), and becoming extremely reluctant to support potentially failing programs, particularly if they were based on a fixed exchange rate.[4] Slowly a new Washington consensus developed, based on minimal intervention in troubled economies unless economies (particularly fiscal accounts) were straightened up and private investors forced to pay a piece of the cost through some sort of debt restructuring. Only when these two pre-requisites were met could a country access help from the international community.

The first default, in Russia, was a hard test for this view, as it occurred in a country where the political, military and economic risks of pursuing a hands-off strategy were highest. Not surprisingly, once the predictions of Armageddon did not materialize the Washington

[3] The United States Court made clear in *Republic of Argentina vs. Weltover* that sovereign borrowing is "commercial activity". The Court decided that a national of any state could bring a suit against any sovereign in a US court so long as there exists some connection between the commercial activity and the United States.
[4] In any event, each case was decided on a case-by-case basis. Argentina, for example, was denied support in late 2001, while Brazil was receiving considerable funding.

position hardened even more in the ensuing experiences of Ukraine, Pakistan, Ecuador and Argentina.

However this view implied that countries found a more favorable disposition in IFIs, only after the default decision, thus allowing them to reverse with relative ease the political and economic crises that had made them reach that decision. This, in turn, strengthened the perception, at the country level, that defaults were feasible, and maybe beneficial. Thus, the dynamics were such that countries also became increasingly favorable to debt defaults.

The combination of this new Washington consensus calling for no more bailouts and a hands-off policies, with aid coming only when "sustainability" through debt restructuring was assured, led to relatively successful default experiences. The combination was a recipe that also entailed substantial risks by increasing dramatically the incentives for emerging economies to pursue the restructuring option. In the end this scenario led to the explosive case of Argentina, the largest default experience in history, and the looming threat of Brazil. While these cases are still unfolding, their resolution will shape to a great extent whether we will face relatively stable international financial markets in years to come or whether instability will be on the increase. If Argentina also is allowed to restructure its debt in a successful manner it will probably encourage future defaults in the near future leading to higher medium term risk and also potential instability to the emerging economies asset class. If the default is painful for both bondholders and the country, it will lead to a sub-optimal outcome in this specific case as the agreed objective is to minimize the costs of bankruptcy.

There is a wealth of questions associated to recent developments. What have the recent experiences taught us? How will future restructurings be implemented? Is the balance of power changing in favor of creditors or in favor of debtor countries? Will the future lead to a replication of the Argentine default in countries such as Brazil or Indonesia?

The purpose of this project is to extract the main lessons from the recent default experiences to answer these questions. The discussion is centered on individual country studies, presented in a chronological order, so as to be able to refer to the role of previous experiences in the decisions taken in each case. The description will be deliberately kept practical and close to the known facts, and solely focused on the restructuring episodes so as to minimize the subjectivity in the presentation of the material. We examine the timing of the default decision, with a special attention to the legal issues involved and the specifics of the agreements. We briefly review the impact of the default decision.

Given the diversity of the few default cases in the last decade, almost all of the questions typically prompted by the discussion of debt restructuring were in practice addressed (not always successfully) at least once. In the final section of the paper, we go a step further to trace the learning-by-doing process that seems to have characterized each new episode, and to take stock of the analysis of the case studies by summarizing the main lessons to be extracted for the future, both from the standpoint of a country facing a default decision as well as for international financial institutions in their aim to facilitate the resolution of the restructuring process in the least disruptive manner.

The paper proceeds as follows. In Chapter II we review the differences in the restructuring procedures in both decades. In Chapter III we discuss five case studies: Russia, Ukraine, Pakistan, Ecuador, and Argentina. These are the five countries that during the 90s hit the SD (selective default) category according to Standard & Poors.[5] We also refer briefly to the Elliot case regarding the Peruvian Brady restructuring. Table I.1 shows the timetable of experiences for each case through the final restructuring of the defaulted instruments.[6]

Table I.1

	Crisis starts	Date of 1st Default/Restructuring	Exchange
Russia	August 1998	August 1998 (int. debt) December 1999 (ext. debt)	August 2000
Ukraine	August 1998: Russian crisis	September 1998 (int. debt) January 2000 (ext. debt)	April 2000
Pakistan	May 98: Nuclear Testing	No default	June 1999
Ecuador	1997: El Niño crisis	August 1999 (ext. debt) October 1999 (int. debt)	August 2000
Argentina	March 2001: López Murphy's failed stabilization package	December 2001 (int. and ext. debt)	?

Chapter IV concludes with some discussion as to the implications of these experiences for borrowing countries. We also discuss briefly what these experiences teach us in terms of the design of the international financial architecture, the PSI discussion, and the potential recurrence of more default experiences.

We conclude with the view that the current benevolent view of defaults in international financial circle risks increasing instability in the near future. Over the latter part of the 90s defaults have been encouraged, and international aid has been forthcoming in the aftermath of a debt restructuring. As a result, defaults have worked better, have become more common, bigger and more aggressive over the years. Certainly this is not a stable situation. Yet, the previous status quo, where fear of defaults implied that help was forthcoming, whatever the circumstances, was equally unsustainable. Over the next years the international financial community will have to find a solution to provide a minimum of stability to the international capital market; but as we sail into unchartered waters no obvious solution is yet evident.

[5] Indonesia also briefly attained that classification. However Indonesia's SD classification referred to a syndicated loan with a group of banks and therefore is very different to the standard bond market renegotiations entailed in the other cases.

[6] We include an appendix with supporting hard macroeconomic data.

II. Debt Restructurings in the 80's and 90's

Three main reasons explain why countries default. The first refers to concepts such as solvency and sustainability. While we will argue below that sustainability is a relatively undefined concept, it supposedly relates to whether the sequence of primary surpluses that keep the total stock of debt stable as a percentage of GDP is feasible or not. An output contraction, a financial crisis which forces the issue of large amounts of debt associated to a financial sector bailout, a terms of trade shock, or a devaluation that makes foreign exchange payments more costly, are among the main factors which trigger insolvency.

The second reason is associated to liquidity problems. A country may face no problem in terms of its ability to honor its debt, but it may face large disbursements induced by a sizable hump in amortization or interest payments. One may ask why a liquidity crisis should develop if financing is sustainable but the logic of the liquidity crises is similar to that of bank runs, and, therefore, has no fundamental reason. The only relevant feature is that, if it happens, it is better to be on the other side. Thus, multiple equilibria are a possibility. The important point is that lack of credibility, a confidence crisis, political crises, or just the fear of moving to a bad equilibrium, may be the reasons to withdraw financing and force a country into default. [7]

Finally, there are countries that may just be unwilling to pay. They may choose at some point to give up with integration in world capital markets, assume the implications of default maybe with the hope of freeing resources for other domestic priorities.

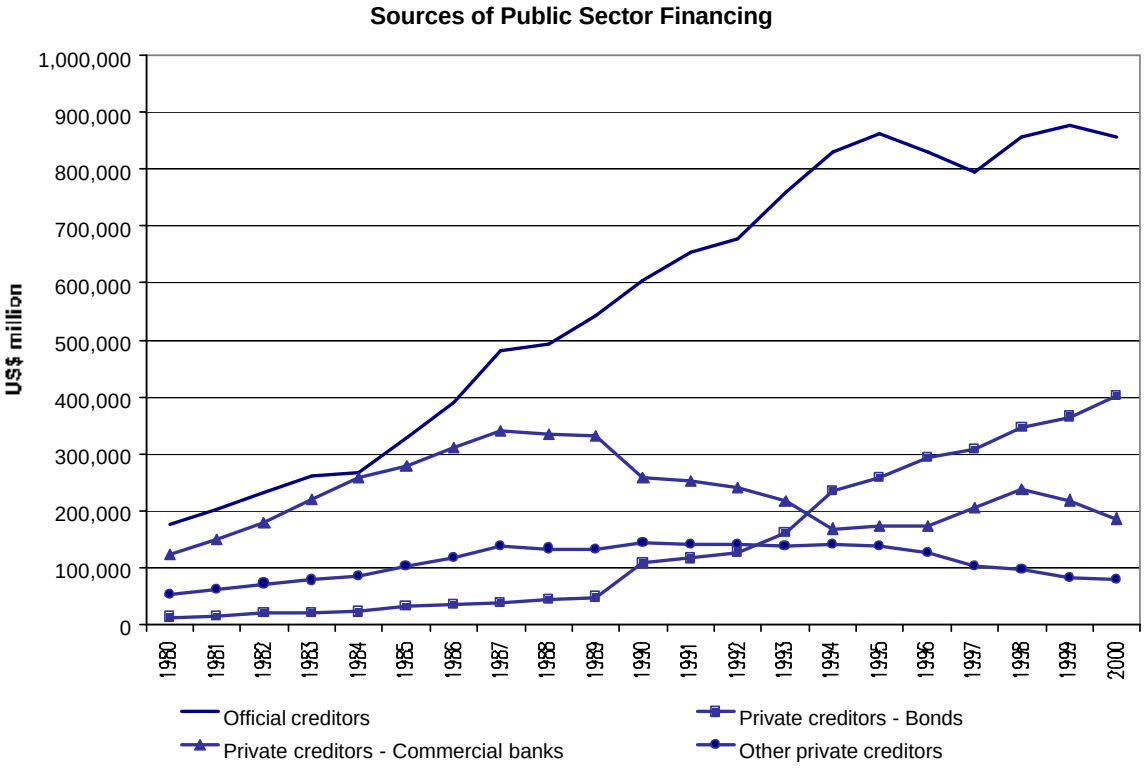
The three reasons have many historical antecedents, and a review of all of them clearly exceeds the scope of this work.[8] Yet in most cases defaults have led to protracted negotiations during which access to capital market was limited. In many cases defaults had lingering effects through an increase in lending costs once a country started borrowing again. For example, Ozler (1992 and 1993), looks at the costs of borrowing during the lending boom of the 1970s, comparing the cost for countries that had previously defaulted with that of those that had not. Her results indicate that past defaulters were charged a higher interest rate, confirming that commercial banks did look into past history to determine interest rates. More relevant for recent experiences is GS-ESS, Goldman Sachs' model of equilibrium sovereign spreads during the 90s (see Ades et al, 2000) that finds that debt issued as a result of a restructuring carry a larger cost of about 165 bps..

The long lags that bondholders had to confront in previous debt restructurings led in the early 70s to a completely different approach to emerging economies financing. Aided by the fact that many of the resources available for lending, the result of large current account surpluses in Middle East countries in the aftermath of the oil crisis of 1973, were funneled directly into banks, it were the banks themselves which intermediated these funds. Developing nations seemed the natural place to allocate these massive new resources. As

[7] This point is made in a series of papers by Chang and Velasco (1998a, 1998b and 1999) and Cespedes, Chang and Velasco (2000).
[8] See Dornbusch and Draghi (1990).

Figure II.1 shows, while some bonded debt was issued during this period, banks took up the brunt of the lending. Due to the sheer size of the resources at stake, it went without questioning that the banks would carefully look into the finances of the debtor countries, thus insuring that a new debt crisis would not occur. This expectation, however, turned totally wrong.

Figure II.1.



Source: World Development Finance. WB

In 1982, in response to a substantial hike in interest rates in the US, Mexico declared a moratorium on its debt, triggering the beginning of a debt crisis that lasted through the early 90s. Once the default in Mexico occurred, all banks simultaneously pulled the strings in other countries, trying to simultaneously recover their money and leading to a domino effect that triggered defaults in most developing economies. Over the decade the agreement to deal with the situation worked in the following manner: Banks gathered in a consortium with the purpose of conducting debt renegotiations. During the renegotiation period principal maturities were in general rescheduled while interest payments remained current. Trade and interbank lines were maintained at specified minimum levels pursuant to formal or informal arrangements, and any financing gaps of the debtor country in the initial years were covered through a combination of new money and additional assistance from official sources. Economic discipline was instilled through the acceptance by the debtor country of an IMF sponsored adjustment and stabilization program.[9]

[9] This approach was dubbed by some as the Baker plan for US Treasury Secretary James Baker. See Buchheit (1990).

A fundamental premise of the debt resolution of the 80s was that all similarly situated commercial creditor banks should be treated equally, both in terms of rescheduling of their existing exposure as to their proportional participation in new credit facilities. From a legal standpoint this equal treatment was ensured through a series of contractual provisions in the restructuring deals such as sharing clauses, mandatory prepayment provisions, negative pledge clauses and pari-passu covenants. However, syndication of all loans could not be compelled legally so some degree of moral suasion remained necessary. This monolithic approach implied complete ignorance on the specifics of each bank, and this, in the end, was responsible for some delays and difficulties in reaching agreements. Thus, over the years new flexibility had to be introduced in order to suit the differences both of different creditors and debtors. In all cases, however, debt forgiveness was off the table as an alternative.[10] In order to solve the free rider problem among commercial banks, several sweeteners were offered to those participating in the restructuring. The main mechanism was participation of multilateral organizations such as the World Bank, or lending in association with an IMF program.

While these deals insured that any payments made by the country would go to the consortium, it actually ruled out any possibility of new lending by other banks or through other instruments to the troubled debtors. This reduced the incentives of countries to solve their economic problems, and by coaxing any alternative lending the framework was, to a large extent, responsible for the length of the renegotiation process.

In some cases banks also used indexed growth facilities by which banks automatically reduced their exposure upon better than expected growth performance or exceptionally high commodity prices for the debtor country. The 1986-87 Mexican financing package contained a growth facility that was indirectly linked to the world price of oil. Debt for equity swaps was another alternative used by many countries (including Argentina, Chile, Ecuador, Mexico and Philippines) to allow for the conversion of external debt instruments into local currency equity investments.

The funds provided by the IMF and the resources generated by debtor countries allowed banks to exit in an orderly fashion from their exposure to developing country risk. In spite of this, banks suffered considerable losses, to the point that they chose not to re-enter the market for government debt when credit reemerged in the 1990s.

Debt relief efforts were impaired by the existence of legal provisions ensuring equal treatment of all debt holders. One way around this was to offer an exchange to all creditors with no compulsion that any particular lender accepted the offer. The sovereign could enhance the attractiveness of this new instrument by agreeing that it would not be subject to further new money calls, that it could be eligible for debt to equity conversion programs or it could carry the enhancement of a third party. In return the terms of the payments could improve in maturity or interest cost. Mexico and Philippines offered these instruments throughout the 80s. Exit bonds were also offered in some cases (for example in the

[10] However banks were slowly building provisions to exit from developing country risk exposure.

Argentine 1987 package). However, these alternatives were not very successful. Not a minor point was the negative view of US authorities to such deals.[11]

The official position of the US changed dramatically on March 10, 1989 when US Secretary of the Treasury Nicholas Brady (successor of Secretary Baker) announced a major shift in US policy. In the new approach the US would support and encourage debt reduction packages that could resolve pending debt issues and re-open market access for many of these economies. In fact, it mandated multilaterals to put their weight into the realization of these transactions.

At the official level this philosophy transformed itself in action very quickly. In September 1990, Paris Club creditors agreed on a new treatment for lower middle-income countries debt. This new treatment called "Houston terms" granted three substantial enhancements with respect to classic terms: (i) Non Official Development Assistance (non-ODA) repayment periods were lengthened to or beyond 15 years. ODA repayment periods were lengthened up to 20 years with a maximum 10-year grace period; (ii) ODA credits were to be rescheduled at a concessional rate; (iii) debt swaps could be conducted on a bilateral and voluntary basis. Eligibility for Houston terms was to be assessed on a case-by-case basis by Paris Club creditors, taking into account the track record of the debtor country with the Paris Club and the IMF and at least two of the following three criteria (i) low level of income (GDP per capita smaller than $2.995), (ii) high indebtedness defined as reaching at least two of the following three criteria: debt to GDP higher than 50%, debt to exports higher than 275%, scheduled debt service over exports higher than 30%; (iii) have a stock of official bilateral debt of at least 150% of private debt. Non-ODA credits were in general rescheduled at the appropriate market rate with 2-3 years grace and progressive payments raising year by year. When a debtor country first met with Paris Club creditors, the "cutoff date" is defined and is not to be changed in subsequent Paris Club treatments. Credits granted after this cutoff date are not subject to future rescheduling.

At the private sector level the shift in policy had been in the making for sometime. During the later part of the decade a secondary debt market had appeared for developing country debt, trading at sizable discounts. The realization that losses had already been incurred wetted the appetite of debtor countries to somehow share the benefits from honoring their commitments. On the other hand, the development of the secondary market put pressure on banks that had not sold off their loans, as they feared that at some point they would be called to mark to market the value of such loans. In fact Citibank started along this path in May 1987 by posting loan loss provisions against its LDC debt. Thus, towards the later part of the 80s, the equilibrium became unstable and started veering naturally towards some kind of debt relief. This was further enhanced by the fact that tax benefits would accrue only upon the granting of the debt relief.

Mexico offered a preview of the Brady deal in late 1987 by offering an exchange of bank loans for a new Mexican bond with a 20 year maturity and with principal collateralized

[11] Late in the game there were also several attempts to provide debt relief for very poor countries. One such scheme was the implementation of debt buybacks. However, these met mixed views; the main criticism being that their benefits accrued mainly to exiting creditors.

with a US zero coupon treasury. The reception to this instrument, without interest collateral, was muted. Principal discounts offered were in the order of 30% but only a fraction of the amount Mexico was prepared to exchange was subscribed. Obviously, more resources had to be put on the table to provide additional enhancements to switch out of the original loans.

While originally the idea was to approach the banks in a decentralized fashion, the first Brady deals were offered as a single global transaction. This feature was considered essential by debtor countries in order to avoid holdouts. In fact, it turned out that convincing recalcitrant holdouts turned out to be one of the main difficulties of the Brady deal. Eventually, Mexico's 1989 deal became the model of Brady restructurings, by which old commercial debt was swapped for a series of instruments that differed depending on whether they delivered capital reduction or interest rate relief. Par bonds were exchanged at par, but entailed sharp interest rate reduction with step-up coupons; Discount bonds, on the other hand, included capital reduction. In general discounts oscillated around 35% even though in some cases the number was higher. Ecuador, for example obtained 45% capital reduction when implementing its Brady deal in 1995.

The Brady deals included a number of relatively standard instruments: (i) *Par or Discount bonds. Pars* were loans exchanged for fixed rate bonds issued with below-market interest rates at par. *Discounts* were floating rate bonds, issued with market interest rates, but with a capital write-off. Both were backed by a US Treasury zero coupon bond for principal collateral. These bonds had long-term maturities, were expected to be very liquid, and had a long average life and bullet amortization. They represent the most common Brady bonds outstanding. (ii) *Front Loaded Interest Reduction Bonds (FLIRB's*). In this case loans were exchanged for medium term step-up bonds at below-market interest rates for the initial 5 to 7 years, and then at a floating rate for the remainder of the term. These bonds provided partial interest collateral in the form of cash, with collateral rolled over for subsequent periods upon timely interest payments. While these were less liquid than the par/discounts, they had a much shorter average life, as amortization payments began ordinarily after 5-7 years. (iii) *Interest Arrears Capitalization.* Commercial banks had rescheduled interest in arrears of Brazilian, Argentine and Ecuadorian debt, capitalizing the interest into new short-term floating rate bonds, called *Interest Due* or *Unpaid Bonds* –as in Brazil's IDU and Ecuador's PDI. These bonds had been issued prior to the rescheduling of principal into the Brady format. (iv) *Debt Conversion Bonds or New Money Bonds.* In some cases countries were believed to have the ability to pay their foreign loans but had so far been unwilling to service the debt. The initiation of a Brady deal was a sign of a new willingness to repay foreign debt, augmenting the creditworthiness of the countries'. Thus creditors exchanged loans for bonds at par, and even provided additional funds to the Brady issuing nation, at a floating rate of interest through the so called *New Money Bonds.* They include short-term floating rate bonds as issued by Venezuela, Uruguay and the Philippines and carried no collateral.

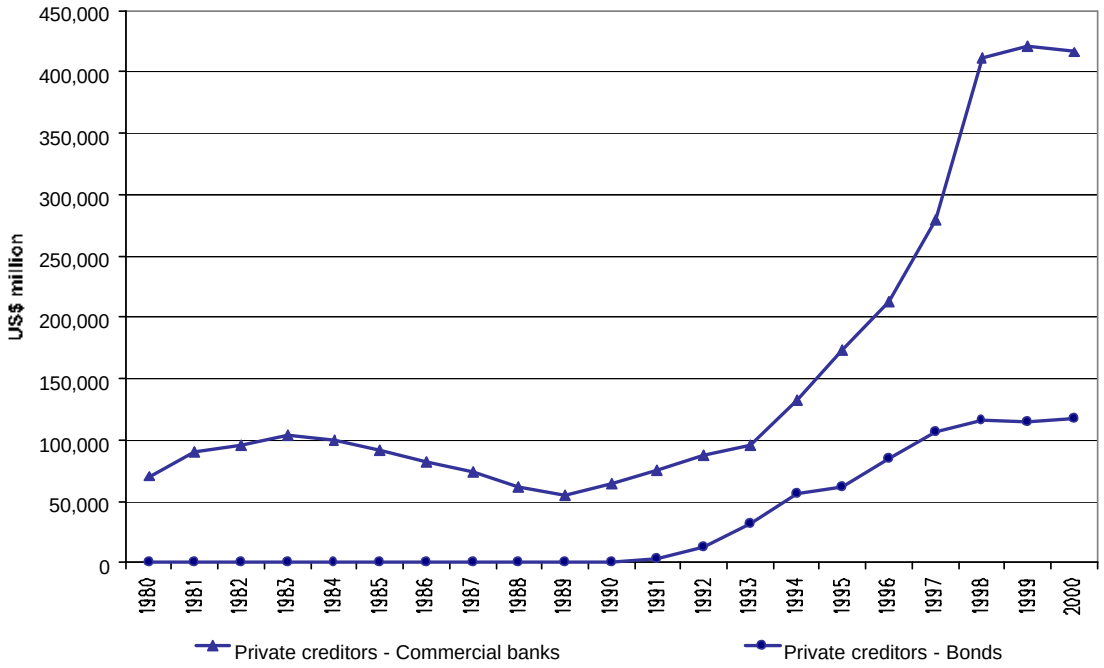
The Brady bonds were structured as an inviolable set of instruments. Not only were they issued according to New York Law, which does not allow for bondholders to change the payment conditions of the bonds unless there is unanimity, but they included a series of

provisions which made them practically default risk free. Among these provisions we find the (i) mandatory prepayment clauses, that restricts not ratable prepayments to others, (ii) turnover clauses, that say that creditors who receive preferential prepayments have to turn it over to others, (iii) the sharing clause that says that whatever one creditor gets should be shared with others, (iv) the negative pledge clause that says that other lenders are not to be given a preference by having assets pledged to them and (v) the acceleration clause where a creditor who holds debt in default gets to ask for all the debt to be paid immediately.

The Brady deal was considered a success. It normalized the relations between creditors and debtors and opened up a new era of resumed lending to emerging economies. However, some of the characteristics of the deal, particularly the stepped up characteristic of the interest payments included in some bonds, would impose an unsustainable burden on some debtors 10 years later. In addition, the belief that a default free instrument had been found also was proven false.

While banks had been partially bailed out during the crisis, they suffered considerable losses and decided not to reenter the market for government borrowing once new lending opportunities became available. However, bank lending remained important for private sector lending as shown in Figure II.2.

Figure II.2
Sources of Private Sector Financing



Source: World Development Finance. WB.

Because the new lending was focused on the bond market new measures were developed to assess the risk appetite of the investors for emerging market instruments. Paramount among this has been the Emerging Market Bond Index constructed by JPMorgan.

Box: How risk is measured in Emerging Markets: The EMBI, EMBI+ and EMBI Global

The J.P. Morgan Emerging Markets Bond Index (EMBI) is a total-return index that tracks the traded market for U.S. dollar denominated Brady and other similar sovereign restructured bonds. The EMBI was constructed – starting December 31, 1990 – using a methodology adapted from the J.P. Morgan Government Bond Index. The objective was to create a benchmark that accurately and objectively would reflect returns from price gains and interest income on a "passive" portfolio of traded emerging markets bonds. The index is market capitalization weighted and fully invested at all times. Individual bond returns are calculated based on daily changes in bid prices and on interest earned according to exact coupon accrual and payment conventions. Total EMBI returns are calculated by weighting daily bond returns in proportion to market capitalization.

Regarding the inclusion of bonds two eligibility criteria are applied: the bonds must be denominated in U.S. dollars and they must have a minimum outstanding of $500 million. Because the EMBI's issues are limited to liquid bonds, each of them can be bought and sold at short notice and are quoted daily by several market makers at relatively low bid/offer spreads. Thus, the EMBI provides a replicable benchmark against which an investor's performance can be realistically compared.

The EMBI+, introduced in July 1995, was created to fulfill investors' need for a broader benchmark than that offered by the EMBI by including Global bonds and other new debt issued voluntarily during the 90s. In order to include other markets in the broader EMBI+, it was necessary to loosen the EMBI's strict liquidity criteria. Since September 30, 1998, the EMBI and the EMBI+ use the same criteria for adding or dropping instruments, these imply some modifications to the EMBI rules that are designed to provide additional stability to the index's composition during volatile market conditions.

The EMBI Global, introduced in July 1999, expands upon the composition of its predecessor, the EMBI+, by using a different country selection process and admitting less liquid instruments. Instead of selecting countries according to a sovereign-credit-rating level, as is done with the EMBI+, the EMBI Global defines emerging markets countries with a combination of World Bank-defined per capita income brackets and each country's debt-restructuring history.

Liquidity criteria

- For a bond to be ADDED to the EMBI+/EMBI, it must be rated:
L1 for 1 month, or L2 or higher for 3 consecutive months, or L3 or higher for 6 consecutive months.
- For a bond to be DROPPED from the EMBI+/EMBI, it must be rated:
L4 for 6 consecutive months, or L5 for 1 month.

Additional rules:

- A bond can be added to the index as long as its remaining maturity is greater than 2.5 years; once in the index, it may remain there until 1 year before its maturity, assuming it meets the liquidity criteria.
- The EMBI+ and EMBI have a credit ceiling of BBB+/Baa1. When a country receives a rating of A-/A3 or higher from both S&P and Moody's, it is dropped at the next month-end rebalancing.
- Once dropped from either index, a bond may not reenter it for 12 months.

Liquidity rating definitions

	Minimum face amount outstanding (US$)	Average bid/ask spread	Quoted by:
L1	2 billion	≤ 3/8 point	all designated interdealer brokers
L2	1 billion	≤ 3/4 point	at least 1/2 of the designated interdealer brokers
L3	500 million	≤ 1 1/2 points	at least 1/4 of the designated interdealer brokers
L4	500 million	≤ 3 points	at least 1 designated interdealer broker
L5	500 million	> 3 points	not quoted by any designated interdealer brokers

Lending in the 1990s suffered a series of ups and downs. The first major reduction in capital flows to emerging markets was the result of the Tequila crisis at the end of 1994. In the ensuing years a series of other crises, mostly associated to collapsing pegged exchange rate regimes, led to a flattening of capital flows. Yet, these crises, in Thailand, Hong Kong, Korea, Indonesia and other countries, did not lead to debt defaults. However, in 1998, a crisis in Russia, once again associated to a collapsing peg, led to a default on domestic debt followed shortly after by a default on external debt. This marked the beginning of a string of new restructuring experiences. In the following three years Ukraine, Pakistan, Ecuador and Argentina have all defaulted or had to restructure under the threat of default. These experiences are documented in Chapter III. [12]

In contrast with the mechanics of the 1980s in which countries were withdrawn all financing suddenly, literally being forced into default, the experiences in the 1990s left open many more margins on which the country had to make decisions. First of all countries had to decide which instruments they would default upon. Ecuador and Argentina chose to default on all debt instruments, while Russia, Ukraine and Pakistan chose a limited default that included just a few.

The countries also had to decide if the default would be focused on local creditors or on foreign creditors. In some cases this distinction is difficult to make, but some instruments are clearly segmented in terms of their bearers, so that, to some extent, segmentation is at least partially feasible. While in general policy makers would prefer to go harder on foreign creditors, the reputational and international implications of such decision may make this alternative unfeasible. Thus, one thing is what policy makers would prefer to do, and another is what they may be able to. While Russia defaulted initially mostly on local bondholders (holder of GKOs and OFZs)[13], when Ecuador decided initially not to default on its Eurobonds, it met criticism from the international financial community, which requested a sort of pari-passu clause among bondholders that obliged the Ecuadorian government to backtrack this decision and include them in the restructuring deal. However, it did manage to limit the discount on PDI bonds, which were mostly held by local bondholders. Argentina, implemented a local-exchange in November in anticipation of a harsher restructuring of external debt, triggering a withdrawal of support from IFIs.[14]

Similarly, a decision has to be made regarding debts with IFIs and bilateral lending. Here there appears to be a clear pattern. IFIs lending is seen as senior to everything else, with only few cases of default with multilaterals.[15] This seniority may be a way of buying the seal of approval that only IFIs can provide to a country, as well as the direct link that multilaterals open with the countries that own these organizations. In many cases, it is the

[12] The impact of these experiences on capital flows to emerging economies is an interesting question but beyond the scope of this work.

[13] However, there were sizable holdings of these instruments by non-residents.

[14] The option of restructuring local personal funds debt, where local bondholders could have been completely isolated had been discarded.

[15] This has been pointed out by some as an indication of the inconsistency of the Elliot ruling (which attached a pari-passu clause to all lending regardless of its status). If Elliot would hold, payments to IFIs could be attached by bondholders. If this were the case, even the IFIs should be interested in having Elliot overruled. See Gulati and Klee (2001).

private creditors themselves which want the country to agree with the multilaterals first, as they consider that their job is to go through a "due diligence" process with the country, which they cannot do themselves. Thus, the seniority of IFIs lending is a market accepted and encouraged outcome. On the other hand, bilateral lending and concessional official lending is usually considered junior to other lending. For example, Pakistan built substantial arrears with the Paris Club, while never entering in default with private bondholders. Ecuador was in arrears with the Paris club and still was able to issue a Eurobond in 1997.

As the Paris Club restructures on concessional terms, it has developed the "Comparability of Treatment" clause by which it forces, when agreeing on a debt relief program, a commitment by the country to try to obtain similar conditions in terms of maturity extensions, NPV savings and debt relief from private bondholders. The Russian deal was an interesting exception to this rule. London Club private creditors, granted debt relief in advance of Paris Club renegotiation, and then asked for "Reverse Comparability of Treatment", i.e. that the Paris Club match the debt relief they had conceded.

Similarly, governments had to decide whether to do the default in several successive steps or as a one shot move. The initial defaults (Russia and Ukraine) were of the stepwise nature, with the country denying default to the last minute, only to restrict the default to specific instruments and those strictly necessary. The most recent two, Ecuador and Argentina, were broader and simultaneous.

How the default is implemented may not be independent of the motives of default. A country facing a liquidity or credibility problem may choose to default selectively, to obtain the necessary relief to go through a particularly difficult moment in terms of financing needs. Countries with a solvency problem (Ecuador?) or with unwillingness to pay (Argentina?) may be more inclined to general decisions.

The above refer to a set of decisions that determines the scope of the restructuring to be implemented. Now, once the instruments have been chosen, how is the restructuring actually implemented? In the experiences of the 1990s, the restructurings have all taken the form of a bond swap, by which old debt is swapped for new debt. The characteristics of the new instruments offered to investors are related to the ultimate objectives of the restructuring decision. We identify three main objectives of any debt restructuring:

- Achieve cash flow relief (reprofile debt payments to avoid short run financing needs).
- Achieve debt relief (to reduce the debt burden).
- To avoid holdouts and litigation in the restructuring process.

Solving these problems effectively increases the chances of a quick return to voluntary lending. We discuss the mechanics used to achieve each of these objectives.

Cash flow relief

In order to obtain cash flow relief, it is not necessary to default on the debt as there is always a price at which the payment profile can be adjusted in a voluntary manner. The most straightforward mechanism is a voluntary bond swap, by which a maturing bond is exchanged by another bond with equivalent market value but a different payment stream. Bondholders have several reasons to participate. First, the new issues will certainly be more liquid, with holdouts from the exchange risking remaining stuck with an illiquid instrument post-exchange.[16] Second, the creditor may fear default if the exchange rate is unsuccessful. This rationale is weakened by free rider incentives, but if no debt relief is asked for this problem is significantly diluted. In any case, voluntary debt exchanges may be more feasible with large players or concentrated creditors.

In addition the new bonds may include a wide range of benefits, generally referred to as sweeteners. These can be cash payouts, interest increases, or the offering of collaterals or guarantees. Also they could arise from regulatory and tax prerogatives such as tax exemptions, tax-canceling properties, rediscount window privileges and a variety of other alternatives. Finally, sweeteners can include a number of warrants, such as exchange warrants (which give the option to increase participation in the exchange in a given time period) and extension warrants (which allow to exchange some bonds for longer maturity instruments). Pakistan's debt exchange had these features. No debt relief was included and substantial upgrades in the interest payment stream were offered. As the issue was relatively small and that the holdings were fairly concentrated free rider problems were small and this allowed to negotiate a mutually beneficial agreement.

Alternatively, cash flow relief, or voluntary debt refinancing can also be obtained by changes in regulation that increase the demand for government debt. For example, allowing banks to use government bonds to integrate reserve requirements. Russia, Ukraine and Argentina used this mechanism to prop up demand for their debt prior to default. Governments also offered to retire debt at face value if debt was used to pay taxes or to purchase equity (for example, of privatization offers). While this implies a one to one reduction in tax collection, if concentrated in short term instruments, it may create demand for short-term rollover. If it includes longer maturity bonds it can actually aggravate the short run cash flow problem if it reduces tax collection.

For a country that does not expect to default, allowing firms to pay taxes with bonds, allows for a substantial tax break for local corporations at the expense of bondholders. If a bondholder takes a loss in market price, selling it to the local entrepreneur allows this agent to capture immediately the benefits of the government's full compliance with its obligations. As only the local entrepreneur can profit from the tax facility, the mechanism gives an advantage to local firms.[17]

In spite of these alternatives the standard method for solving liquidity and cash flow problems remains the participation of IFIs, which are still the main source of cash flow

[16] If the new instruments provide much improved liquidity they may be issued at a lower return than previous instruments yielding a NPV savings.

[17] However, a secondary market for these instruments could develop which may allow for a sharing of the benefits.

available to most countries during crisis times. However, IMF participation, after the Russian fiasco, cannot be taken any longer for granted. Yet, it is likely that under reasonable macroeconomic policies IFIs money will still be available to deal with short run cash flow problems. So far IFIs contributions to resolve these problems have been decided on a case-by-case basis.

Achieve Debt reduction

In order to achieve debt reduction, a country has to convince creditors that it cannot pay and reach an agreement in order to swap instruments for new ones yielding a lower NPV. The main problem in such strategy is to convince those who participate, avoiding litigation and holdouts from those that choose not to participate.

Obviously, IMF conditionality and having a Fund program is a pre-requisite for the investment community to start discussing an agreement. In fact, an agreement with the Fund has prior to action in all the cases studied in Chapter III. Argentina is holding its debt negotiation as long as an agreement is not reached with the Fund. Without the agreement of the Fund, private bondholders don't feel that participating has any chance of guaranteeing a minimally stable outcome, and find dangerous to grant rights that could be renegotiated later on.

Once an agreement with the Fund is reached and a reasonable macroeconomic and political outlook in place, what are the instruments that have been used in order to insure participation of creditors in a debt relief scheme? We review them now.

Sweeteners. Any deal that carries debt relief will have to carry some short run sweetener in order to secure participation. Most of the points discussed in this itemization can be considered as different alternative versions of sweeteners. Cash payouts and increases in the interest rates are two obvious examples. In the case of Ecuador, past due interest and some capital was paid with the resources provided by the release of the collateral of the Brady bonds. In the rescheduling of Russia's Prins and Ians some of the interest due was also paid in cash. In some cases the sweetener is provided by an interest hike or freeze.

Creditor upgrades. During restructuring the debt can be taken by a more senior debtor. This was the case of the Russian Federation taking up debt initially issued by Vnesheconombank. This was valued by the market, and thus improved the chances of success of the transaction. In general, when speaking of sovereign debt, there is limited scope for this type of creditor upgrades.

Guarantees. An alternative way to improve the quality of the creditor is to provide a guarantee or collateral for lending. The Brady deal, which collateralized the principal of certain instruments, was nothing short of a way of providing a guarantee for the new issue. In August 2001 US Sec. of the Treasury O'Neill, suggested this solution for Argentina, and the IMF package granted contained a 3 billion facility to guarantee new issues of Argentine debt. World Bank interest rate guarantees had previously been used in several countries. Unfortunately, guarantees take up money, and if the collaterals are not substantial little can

be done in order to improve the quality of the underlying credit. Argentina attempted to convince local bondholders to accept a guarantee by earmarking some local tax proceeds for interest payments, but this guarantee carried little weight. It also offered the US government to assign dollar denominated customs proceeds to an escrow account in the US, in order to provide a collateral for a guarantee facility. With estimated customs proceeds of about 2 billion a year, the NPV of the collateral amounted to about 20 billion. The proposal met with skepticism by the US authorities, probably unconvinced about their ultimate legal rights to force the transfer of the customs proceeds to the US escrow.[18] Other countries have also used the collateralization of export proceeds. Companies such as PdVSA, PEMEX and YPF have used these facilities, which carry higher ratings (Standard & Poors argues that this may justify increasing the rating by up to four notches). The offer of collateralization and guarantees, by reducing risk, can be transformed into debt relief.[19]

Upgrade in instruments. If neither guarantees not an upgrade in the quality of the lender are possible an alternative is to upgrade the instrument, i.e. offering a more liquid instrument, a more reliable jurisdiction, better terms in the covenants of the issue, or instruments with tax or accounting advantages. For example, banks and creditors cannot write off and compute the tax loss on an instrument unless debt relief is actually granted. In some cases, instruments can be transformed from mark to market to book value, allowing important accounting gains and dividend distribution that the creditor may find useful at a time of crisis. Regulatory prerogatives, such as rediscount window privileges, reserve requirement integration and tax cancellation properties, have also been suggested.

Indexation and growth clauses, also known as *value recovery rights* or *economic and credit-linked warrants,* allow some bondholders or creditors to share in the benefits of their effort in granting debt relief. The mechanism is a clause in which the payment is associated to some macroeconomic factor such as the price of an export commodity or output growth. While these factors have not been very common in recent defaults value recovery rights remain an interesting option as they approximate bonds to shares, therefore aligning the interests of the countries and bondholders. In some cases, for example linking the recovery value to GDP performance may carry risks if it is the country itself that produces the national statistics, however, linking the performance to commodity prices or other well defined asset price reduces this risk significantly. The relative modest use of this instrument remains an open question.

Puts and acceleration clauses. In the Russian Prins and IANs exchange, the new issues included repurchase rights or Puts which granted holders of existing or other new issues of Russian Federation Eurobonds the right to put back to Russia at par those bonds in the event of an acceleration of the 2010s and 2030s. The idea of this clause was to place the new issues at pari-passu level with existing Eurobonds, thus protecting the rights of the creditors moving into the exchange. The facility disappeared after 1 billion of Eurobonds were issued, as those contain cross default clauses with the Eurobonds 10s and 30s.

[18] In fact a similar scheme was used in the Argentine Baring crisis of 1890, but the facility was defaulted upon a couple of years later. See Floria and Garcia Belsunce (2001).

[19] Collateralized instruments traded at a premium during the 90s, relative to their counterparts with pure individual country risk. This has refrained some countries from issuing collateralized instruments.

Principal reinstatement. The Ecuador deal introduced the feature that in the case that a default occurred in the first 10 years that continues uncured for a period of 12 months, it will automatically result in the issuance of additional 2030 bonds to the holders in specified percentages. The goal was to assure creditors that were providing debt relief would not be subject to future renegotiations on weaker terms than those from which they started. It also provides a strong incentive to keep current in the future.

Debt management. Also in the Ecuadorian case, the deal obliged the government to reduce the holding of 2030 and 2012 bonds by given amounts (starting six years after issuance for the 2012 and 11 years after issuance for the 2030) or risk the mandatory redemption of the relevant bond, at par, in an amount equal to the shortfall. In the case of Argentina, the debt exchange of June 2001 also carried some debt management provisos in that the global 2008,which concentrated a sizable share of short and medium term instruments was amortized over three years.

Avoiding litigation and holdouts

The third objective is that of avoiding litigation and holdouts. These two come together as holdouts are usually maverick investors that do not accept a rescheduling in order to sue for better terms. They also bet on a successful rescheduling, which by reducing the relative importance of their claims, makes more feasible a settlement. This is the mechanics by which so-called vulture funds operate.[20]

Protection of the defaulting country from litigation is strengthened by two factors. First, the lack of attachable assets. Embassies and other government property are protected and non-attachable. Some bond covenants specify additional non-attachable assets. Argentine bond issues, for example, stated clearly that Convertibility reserves were non-attachable. Second, sovereign immunity historically prevented bondholders from suing sovereign debtors. The origin of this principle was an attempt to foster the well being between nations, by protecting a country from being sued in potentially biased foreign courts. With the years, and with many national companies (i.e. owned by the sovereign) conducting business in other countries, the absolute version of the sovereign immunity was left aside. The United States started to use a more restrictive approach in 1952 that was codified in 1976 in the Foreign Sovereign Immunities Act. The UK adopted similar legislation in 1978. As a result sovereigns can now be held legally accountable for their commercial contracts with foreign counterparties in the same manner as private parties.[21] Thus, while countries are protected by the difficulty of holding attachments, litigation in international courts is now feasible.[22]

---

[20] Contrary to what is sometimes believed, vulture funds generate strong stabilization forces by buying a country's debt when it is very cheap. While the US courts do not allow the purchasing bond issues for the sole purpose of suing the creditors, this objective is unverifiable and thus its bite as a deterrent for vulture funds rather limited.

[21] See Buchheit (1995, 1997).

[22] We believe the threat of litigation has been grossly overstated. Roubini (2002) considers a number of reasons for why the risk of litigation is less than what has usually been considered. The most important are:

1) Unilateral exchange offers have turned out to be very successful, with large participation.
2) Exit consents dilute the benefits of a holdout.

The question we ask here is what are the mechanisms by which a country can reduce litigation risk to a minimum. One such mechanism is what is known as the introduction of Collective Action Clauses (CAC) that make the restructuring easier and reduces the incentives for maverick litigation.[23] Collective action clauses are more easily introduced in London Law issues than in New York Law issues. London law allows for changes in the conditions of the bonds under majority ruling, whereas New York law does not allow changing payment conditions of a bond except with unanimity. The reason for such a strong stance in the case of the US comes from the fact that if a non-unanimous group of bondholders in association with the stockholders of a company could vote to forego payments on a bond, the company's excess cash could be used to pay shareholders inverting the seniority between bonds and equity.[24] New York law allows, however, for non-payment amendments.

Collective action clauses include three types of clauses: the sharing clause, the collective representation clause and the majority clause.

Sharing clause. The sharing clause states that any payments received by one bondholder have to be shared with other bondholders. Sharing clauses were introduced as part of syndicated loans restructuring deals of the 1980s, to protect banks with little relation with a given debtor country that feared that they could be defaulted upon if the debtor priorized staying current with those banks with which it had stronger commercial ties. In addition, sharing clauses are an important deterrent to litigation, as any proceeds obtained from litigation have to be shared with other bondholders.[25] There are two ways in which the sharing clause can be effected. The English style sharing clause in which the excess

---

3) Sweeteners associated to the exchange can be used to entice all bondholders.
4) It is not clear that a holdout will be able to recover the full value of its liabilities. As long as the exchange provides mark to market gains there are ample incentives to participate.
5) The risk of the new instruments may be lower, increasing the perceived value of the newly issued instruments and incentivating participation.
6) Large financial institutions and large players have an incentive to keep a good working relation with the government and thus avoid litigation.
7) The Elliot decision will probably not hold if challenged in court.
8) The use of CACs can be effectively used to reduce the benefits of litigation.
9) Vulture funds have all the incentives to see a successful exchange in order to increase their chances in litigation.[22]

[23] See Becker et al (2001).

[24] See Buchheit (1998a).

[25] Buchheit (1998b) proposes a sharing clause to read as "Each Bondholder agrees that if it shall obtain (whether by way of payment from the Issuer or following the exercise of set-off rights, litigation or otherwise) any payment in respect of the Bonds held by the Bondholder that is proportionally greater than the payment received by any other Bondholder in respect of the Bonds held by that other Bondholder, then: (i) the Bondholder receiving such excess amount shall pay such excess amount to the Fiscal Agent; (ii) the Fiscal Agent shall treat such amount as if it were a payment received from the Issuer in respect of the Bonds and shall distribute it accordingly; and (iii) as between the Issuer and the Bondholder originally receiving the excess amount, such excess amount shall be treated as not having been paid; provided, however, that no Bondholder shall be required by this Section to share any amount recovered by it as a result of litigation against the Issuer if Bondholder holding at least ..% of the outstanding amount of the Bonds shall have previously consented in writing to the commencement of that litigation."

payment is handed to a Fiscal Agent for ratable distribution, and the American Style clause in which the original recipient purchases sub participations in other creditor's debt.[26]

Majority action clauses. While New York law does not allow for changes in the payment conditions without the consent of all bondholders, London Law allows changes in payment terms with a quorum of 75%.[27] The rules that allow the change in the terms of the bonds with a qualified majority are dubbed majority action clauses. In the case of Ukraine, the tendering of the bonds in the exchange was automatically a proxy vote to apply the majority action clause, thus any bondholder which remained with the original bond risked his terms being changed in such a way that would render the paper less worthy in both characteristics and payment conditions. As the threshold participation rates assigned for the transaction were larger than those required to change the conditions of the bonds, bondholders had a large incentive to participate in the transaction. This type of clauses can be complemented with,

Cram-down clauses, which forces an agreement reached with a majority of bondholders to be binding on holdouts. For example, to protect sovereign debtors from disruptive lawsuits, majority action clauses prevent a small number of creditors from blocking an attempt to renegotiate the terms of the bonds. This clause may restrict litigation only to be feasible if a majority of bondholders vote in favor of pursuing litigation.

Exit consents. In some cases, the debt renegotiation cannot appeal to the majority clause, for example, if referring to payment terms for bonds issued under New York law. A way around this is known as exit consents that consist of changing the conditions of other characteristics of the bond, in particular, non-payment conditions, which can be changed by a qualified majority even under New York law. This methodology was used in the Ecuador restructuring. As bondholders exited the original instruments they voted for changes in other conditions on the original Brady bonds. Among these they removed provisions that would have interfered with Ecuador's ability to close the exchange offer at a time when the country was in payment default, they removed the so called exit covenants by which Ecuador had promised never to seek a further restructuring of the Brady bonds, they deleted the cross default clauses, the requirement that all payment defaults may be cured as a condition to any rescission of acceleration, the negative pledge covenant, and the covenant to maintain the listing of the defaulted instruments on the Luxembourg Stock Exchange. Argentina attempted the same methodology by keeping property on 50 billion of

[26] See Buchheit (1998b).

[27] Buchheit (1998a) proposes a majority action clause the writing "Modifications and amendment to the Fiscal Agency Agreement or the Bonds requiring Bondholder consent of the issuer and the holder of at least a majority of aggregate principal amount of the Bonds at the time outstanding, provided that no such modification, amendment or waiver of the Fiscal Agency Agreement or any Bond may, without the consent of holders of at least ..% of aggregate outstanding principal amount of the Bonds voting at the bondholders meeting convened for this purpose (i) change the stated maturity of the principal of or interest on any such Bond; (ii) reduce the principal of or interest on any such Bond; (iii) change the currency of payment of the principal of or interest on any such Bond; or (iv) reduce the above stated percentage of aggregate principal amounts of Bonds outstanding or reduce the quorum requirements or the percentage of voters required for the taking of any action."

bonds swapped in the November 2001 exchange, thus gaining leverage for their negotiations with foreign bondholders.[28]

Collective Representation Clauses. Once a country decides to default it needs to establish a counterpart. The experience in recent debt restructurings has been varied. Pakistan established direct contact with major bondholders in order to gauge possible acceptable settlements. Russia negotiated with the London Club. Ecuador on the other hand, called for a creditors committee as a consulting group (this turned ineffectual, as creditors chose to present their demands in a private manner). Legally, the question is whether a debt renegotiation counterpart can be established in the legal framework. One possible candidate to take up such role is the Fiscal Agents under which the bonds were originally issued. This would probably meet with strong resistance both from those Fiscal Agents, which would find themselves involved in a problem between third parties, and by bondholders that could have doubts as to whether the Fiscal Agent would necessarily defend their interests in such renegotiation. Lead managers of the outstanding bonds would be another candidate. But they will probably be equally ill inclined to participate from reluctance to accept any co-responsibility in the default. Finally, a third option is a group of bondholders. As long as this group is not enshrined in the covenants of the Bond, there is no formal obligation to do the negotiations through such group. However, even in those cases, these groups have remained an informal and valid counterpart. Their non binding recommendations, are usually useful to individual bondholders to decide whether to follow suit or not.[29]

While the literature has focused on international litigation, domestic litigation should not be disregarded. If a country defaults on its own citizens, these have the right to pursue the case in domestic courts, and, barring the case of a completely corrupt judicial system, they may have certain power to obtain favorable court rulings. Notably, in this case, attachments may be much more feasible. For example, Argentina has faced a number of legal actions called *amparos* when the government attempted to change the terms of the domestic bond exchange by changing their currency of denomination from dollars to pesos at the conversion rate 1.4 pesos for each dollar (when the market rate was closer to 3). The government used an economic emergency law to justify the swap, but the Supreme Court, in a related recent ruling regarding the deposit freeze stated that the emergency law cannot be used to wipe out the property rights.[30] As of writing whether the Supreme Court would take a similar stance regarding the resolution of the *amparos* relating to the domestic bond exchange was still unclear. In the Argentine default the government is facing massive litigation in local courts while foreign bondholders have been so far extremely cautious with only one or two litigation cases presented.[31]

---

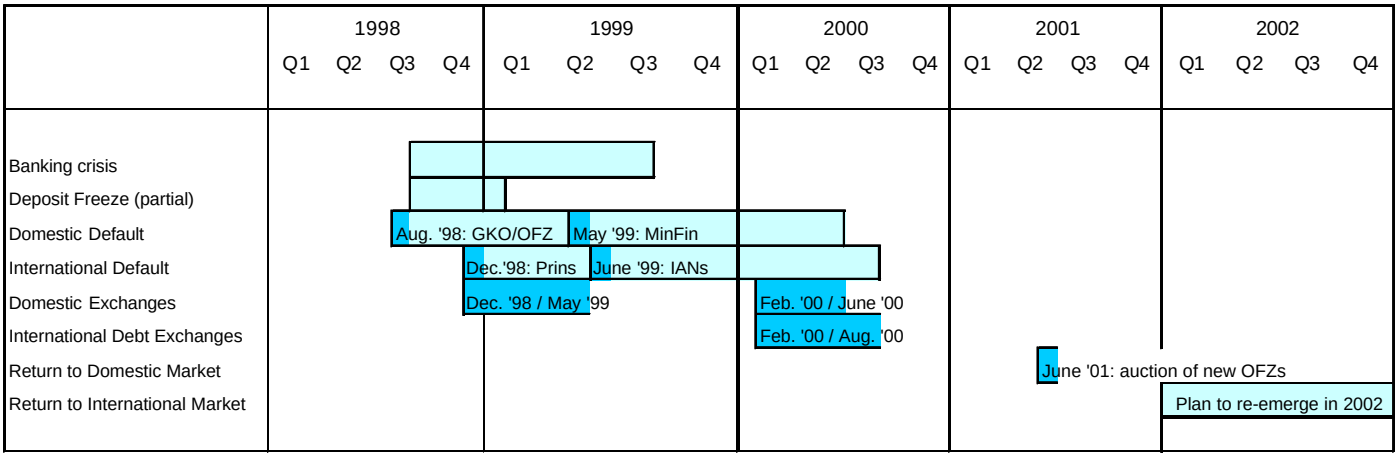
[28] See Buchheit and Gulati (2000) and Lipworth and Nystedt (2001).
[29] See Buchheit (1998c).
[30] The case is *Smith contra Poder Ejecutivo Nacional*.
[31] Recently Rogoff and Zettelmeyer (2001) have suggested that lending should be forced through local courts in order to insure solvency, as there the legal rights of the claimants are more exposed to the arbitrariness of local jurisdiction and legislation, so that foreign investors will be enticed only under very solid circumstances. Barring the experience of Russia and Ukraine, which seems to suggest otherwise, if litigation in domestic courts is easier than in foreign courts, given the ease of attachability, then such proposal will lead to less responsible lending rather than more responsible lending.

III. Debt Restructurings in the 90s: Six Case Studies

Should we really let our people starve so we can pay our debts?
Julius Nyerere (1985)

a. Russia[32]

Figure III.1



Since the demise of Soviet planning in 1989, Russia went through a series of traumatic experiences as the society adjusted to the new set of rules imposed by a market economy. Output plunged continuously through 1996.[33] It rebounded slightly in 1997, but the turnaround turned out to be unsustainable and in 1998 and 1999 declined once again.[34] This period was also characterized by unstable macro policies. After prices were freed on January 2, 1992, consumer prices increased 2500%. Inflation remained high, with monthly rates above 10% throughout 1995.

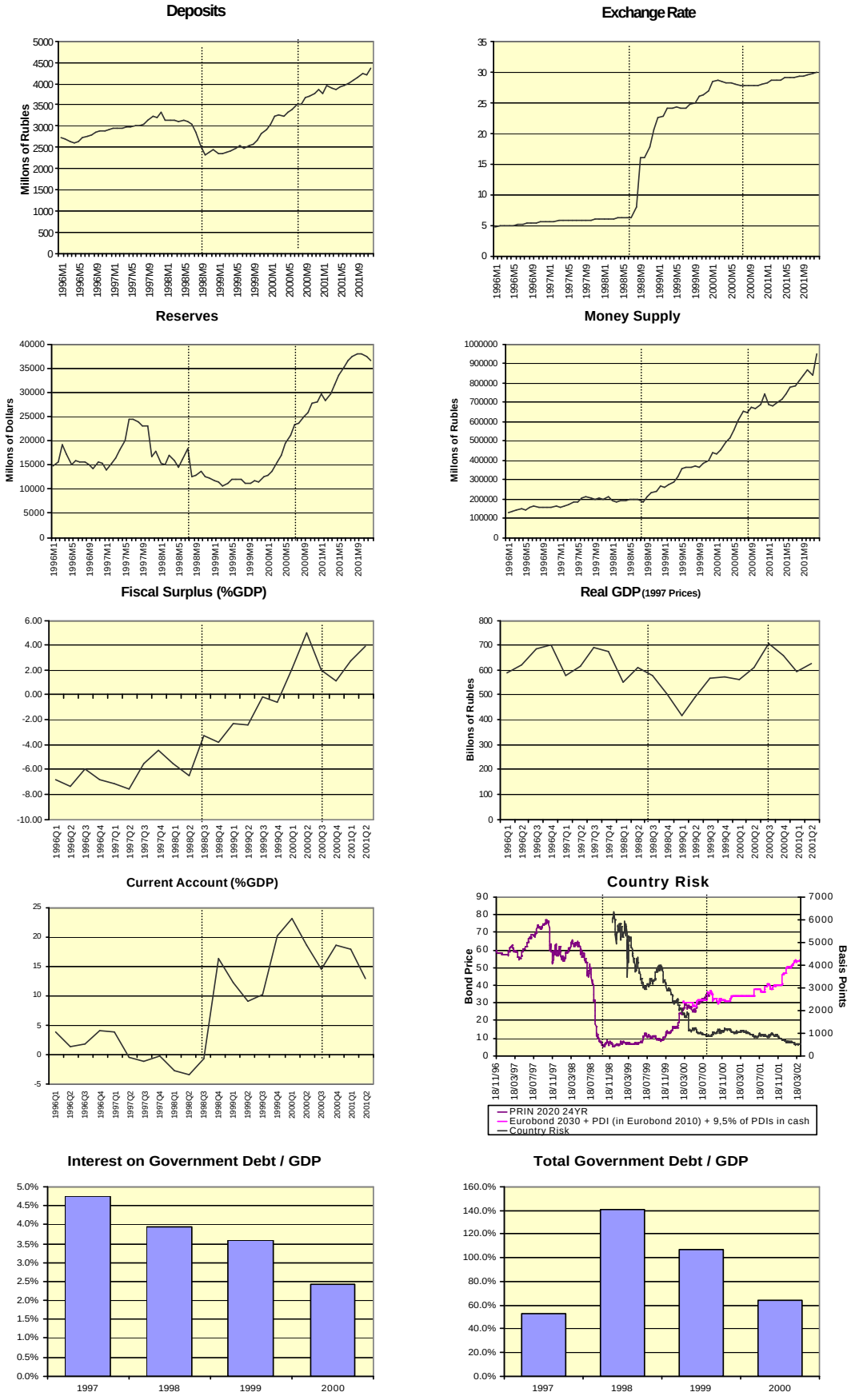
It is not surprising then that the new Russian Federation government defaulted on Soviet era debt in 1991. However, in an attempt to normalize the situation, in 1993 the Ministry of Finance issued five dollar denominated MinFin bonds as payment to Russian exporters for accounts in the Vnesheconombank that had been frozen, also in 1991. These bonds were issued as domestic debt under the jurisdiction of Russian courts.[35]

Things started improving only after the support of the IMF, and the approval of a Standby Facility in March 1995. This program relied on the exchange rate as nominal anchor and

[32] This material has in part been reconstructed with information from NUPI, Centre for Russian Studies. For a complete review of the events leading to the Russian crisis see Kharas et al (2001).
[33] Much of this reduction corresponds to quantity declines, which do not take into account the significant improvements in product quality.
[34] Industrial production had stabilized already in 1993 but started growing only after 1998.
[35] See Duffie et al (2000).

Figure III.2. Russia's Macro Trends

(1st line: default date, 2nd line: exchange completed)



Source: IMF and Bloomberg.

successfully stabilized the economy, with inflation rates falling to very low levels by mid 1996. The Standby Facility was followed by an Extended Fund Facility (EFF) in March 1996.

The program also included a strict control of monetary policy. On April 26, 1995, the Bank of Russia stopped extending loans to finance the federal budget deficit. While this worked considerably well in 1995, year in which the fiscal accounts were relatively in order, in 1996 the government started relying increasingly in the issue of short-term treasury bonds as a way of financing its (growing) deficit. As an agent of the Ministry of Finance, the Bank of Russia organized a government ruble denominated securities market, known as the GKO market where two instruments, the GKOs and OFZs, were traded. GKOs were short dated discount bonds while OFZs were longer dated coupon bonds. Many of these bonds were purchased by local financial institutions that financed their purchases by borrowing abroad. This balance sheet exposure later on turned to be catastrophic.

The international bond market normalized very quickly. On the one hand, the Paris Club, accepted to restructure 40 billion of Soviet era debt in April 1996. That year the Russian Federation also issued two additional MinFins and its first Eurobond. In 1997, the London Club, representing more than 600 Western commercial lenders, also agreed to restructure Soviet era debt into two securities: 6 billion of principal notes (Prins) and 20 Billion of interest arrears notes (IANs). This exchange, that required 90% threshold participation, turned out to be success after more than a year of continuous effort by Vnesheconombank (the debtor) and the reconciliation office headed by Ernst and Young. Finally, there were several Eurobond issues in 1997 and 1998.

While debt financing was flowing easily the exchange rate stabilization became threatened in 1997 not only by the persistent weak fiscal performance, but also by the collapse of oil prices. The sharp fall in oil prices further weakened Russia's budget position as well as its foreign accounts as oil made up a quarter of Russian exports at the time. This increased fears of a devaluation. Facing increasing difficulties to finance expenditures the government started accumulating wage arrears with striking miners and public sector workers.

As the situation deteriorated a political crisis developed. In March a young and fairly unknown technocrat, Sergei Kiriyenko, was chosen for the post of Prime Minister. However, the long row with Congress relating to his approval undermined his ability to straighten the beleaguered Russian finances. After a series of mostly failed attempts at fiscal reform sentiment became increasingly pessimistic. The government relied on the Fund for help, obtaining in July 1998 a new IMF program for $11.2 billion that had the primary objective of trying to avert the devaluation, which at that point seemed to have become as a real possibility. A first tranche of $4.8 billion was made available immediately to be used to replenish depleted Central Bank reserves. The IMF demanded austerity measures to reduce the deficit by 3 percentage points to release additional tranches. However, the political turmoil implied increasing instability and complete inability to push reforms ahead.

The week of August 13 the Russian stock market suspended trading twice as share prices crashed and uncertainty mounted. At this point everybody agreed that a devaluation, if it were to happen, would trigger a collapse of the financial sector, which had substantial exposure to devaluation risk. As a result a banking crisis also started developing. That same week, the flow of tax receipts in the State's coffer dried up due to the growing crisis in the banking sector. The IMF made it clear that no more money was coming unless fiscal improvement could be achieved. But at this point no fiscal measure appeared to be sufficient to contain the loss of confidence that showed in an increase in financing costs. After losing 6 billion of reserves the government decided to pull the plug.

The Crisis

On August 17 the government decided to devalue the Ruble, which two weeks later would have already depreciated by 100%. That same day the Russian authorities unilaterally declared a moratorium on all ruble-denominated public debt, pending negotiations of a restructuring agreement with creditors. This included both GKOs and OFZs. Foreign currency liabilities of Russian financial institutions, including derivative currency contracts, repayments of principal on loans from foreign lenders having a term over 180 days, and insurance payments under credits secured by pledges of securities such as repos were all subject to a three-month moratorium (*prohibition to pay*).

This measure was initially justified by the need to compensate the banks' balance sheets for the impact of the devaluation and the moratorium on sovereign debt. This amounted to a *de facto* default on both the domestic debt and banks' liabilities.[36]

On August 18, Moody´s Investors Service downgraded its ratings on all Russian corporate debt issuers. While a plan for the restructuring of the public debt was announced for August 24, the dismissal of the Kiriyenko government on the 23rd triggered the collapse of the negotiations, a full-scale panic of bank depositors[37], and the breakdown of the settlement system of all domestic financial markets, including the inter-bank money market.

On August 25, the government announced how it intended to restructure its defaulted GKO Treasury bills: bondholders were given a choice of (1) receiving 5% of the nominal value in cash and redeeming the remainder in equal proportions of ruble-denominated securities maturing in 3, 4 and 5 years, yielding interest rates of 30% for the first three years, 25% in the forth year and 20% in the fifth year; or (2) swapping 20% of the nominal values of their existing ruble securities for dollar securities maturing in 2006 at a 5% interest rate, and receiving 80% in ruble bonds.

[36] Prior to default, the Russian government had proposed to exchange stocks of GKO owned by non-resident against 5-year dollar bonds with interest rated slightly above Libor. Residents, instead, would have received 3-years ruble-bonds earning 30% interest rate. This dual treatment, though possibly more favorable to international investors than the one they eventually received, was rejected by the IMF as discriminatory.

[37] The first week after August 17 was marked by a short boom in the sales of private cars and durable goods, as households anticipated mainly a rapid acceleration of inflation; only on Thursday 20 did the first queues appear in front of some banks, before extending to the larger part of the banking sector the week after. Access to cash from abroad, with credit cards issued by Russian banks, also became almost impossible by that time.

Chernomyrdin, the new Prime Minister, also had to struggle for parliamentary approval and had to negotiate a power sharing agreement with the Duma. This triggered a new run on the ruble that briefly touched 20 rubles per dollar before stabilizing at 15 rubles per dollar towards the second half of September (up from 6 prior to the devaluation). At that point the Chernomyrdin administration was over as well, with the Prime Minister being replaced by Yevgeny Primakov in November. The new Prime Minister had to deal immediately with what had suddenly become Russia's biggest problem: the economy was approaching a full-fledged banking crisis.

Banking crisis

During the initial reform years supervision of the banking sector was relatively poor. Relatively undercapitalized banks developed with strong connections to large enterprises or acted as the financial arm of groups of enterprises such as Gazprombank acting for Gazprom. Russian banks had been the main purchasers of GKOs through August, and returns from investment in government securities had been a major source of income, making up to over 30% of total income in the first quarter of 1998 and above 20% in the second. Banks were highly dependent on external borrowing and had accumulated substantial obligations to non-resident banks on foreign exchange loans. Banks' foreign exchange-denominated liabilities exceeded assets by at least $7 billion at the end of 1997. In addition banks were hedging the currency risk of non-resident investors in GKO-OFZ with forward currency contracts. The fragility of the system is stressed in Bank of Russia (1998), which reports that Russia's aggregate banking capital equaled the volume of the frozen GKOs and OFZs. Thus a default on domestic debt was equivalent to wiping out the whole financial sector. Thus, it is not surprising that with sizable long positions in these instruments, banks were put in an unsustainable position when the government decided to restructure the GKO-OFZ (resulting in a virtual freeze of 15.9% of total banking assets) and to devalue.

After the crisis, lines of scared depositors had started to appear at some banks. While depositors could in principle withdraw their funds, banks created administrative obstacles for doing so, eventually engaging in a client-by-client bargaining over a settlement amount. The Central Bank lowered reserve requirements to free liquidity, but this only produced an even larger depreciation of the ruble as banks and depositors used most of the released funds to buy dollars.

On September 14, the Central Bank issued three series of short-term zero-coupon bonds (KBOs) and exchanged them for frozen GKOs and OFZs in the hands of a few selected Russian commercial banks. These bonds were issued without public notification and violated the commitment to equal treatment of foreign and local investors in the debt restructuring previously announced by the government.[38]

[38] In addition, Russia had signed a number of investment protection treaties with the US, UK, Netherlands and Germany in 1989. Those treaties promised not to treat foreign investments or returns on investment less favorable than local ones. They also stated that any repayments could be made without delay and were "freely transferable".

In order to deal with the crisis, the banks' reaction was to merge as a way of enhancing their chances of securing official support. On August 24 Inkombank and National Reserve Bank formed an alliance, which became known as "Gazprom Syndicate" as Gazprom had stakes in both (although Gazprombank did not join). Alfa-Bank, Avtobank and Mezhkombank joined a few days later. On August 25 Oneksimbank, Bank Menatep and Most-Bank announced a merger. These banks were the fifth, sixth and eleventh in the system. In early November, the Russian Central Bank outlined a plan for a selective bailing out of the financial sector. The plan divided Russia's commercial banks into four groups with those in the fourth group slated for bankruptcy. From August to December three of the twenty largest banks had their licenses revoked. As a result of the crisis, depositors of less stable banks shifted to banks perceived to be more stable, particularly to Sberbank, in which the Bank of Russia had participation. The turmoil in the financial sector continued well into 1999. Bank Menatep had its license revoked in May and Most-Bank had to freeze individual deposits and restructure part of them into long-term securities.

The crisis had not been innocuous for Russian debt. On the 2nd of December Vnesheconombank missed a 362 million payment on its Prins, which had been created in 1997. On December 19 the London Club voted not to call in its loans. Such a move could have opened up Russia to legal action including the possible seizure of some of its assets abroad. One month later after the grace period expired, rating agencies placed Russia on default on its external debt. On May 14, MinFin3 was defaulted and on the 2nd of June, Vnesheconombank missed a payment on the IANs. However, at that point the IMF was back on board and a settlement was being discussed to restructure both Prins and IANs.

On July 28, 1999 the IMF approved a 17-month $4.5 billion Standby agreement to support the government's 1999-2000 economic program. This credit was to be released in seven equal disbursements of $640 million. The Fund praised the improvement in Russia's fiscal situation as main driver of its decision to resume lending. After the agreement with the IMF, in August 1999, the Paris Club rescheduled $8.1 billion in Soviet-era debts that was due between 1999 and 2000 allowing a repayment period of 19 years with 2 years of grace.[39]

On February 11, 2000 Russia offered to exchange both Vnesh's Prins and IANs for sovereign Eurobonds of the Russian Federation due in 2010 and 2030. Table III.1 shows the details. The restructuring carried a substantial principal reduction: 37.5% for Prins and 33% for IANs. The deal was closed in August 2000 restructuring all Prins and IANs with 21 billion of new instruments issued in exchange for the original nominal value of 31.8 billion. The deal had many interesting features. Among these:[40]

[39] On the other hand, former clients of the Soviet Union such as Cuba, Mongolia, Vietnam, Iraq, Afghanistan, Angola, North Korea, Mozambique and Ethiopia owed Russia $86 billion in 1998 according to Russian estimates. This figure is controversial because the original debt was expressed in rubles and the $120 billion are calculated at an exchange of 1 US dollar for 0.63 rubles. Realistically, a repayment of less than $25 billion can be expected. Russia has joined the Paris Club as a creditor nation to try to recover that debt. It will probably be forced to accept the Naples terms, whereby two-thirds of the debt is written off and payment is extended over 23 years, with a 6-year grace period.

[40] See JPMorgan (1997 and 2000).

a) There was an *upgrade in the obligor*, as creditors had had relatively limited legal recourse after the December 1998 default on the Prins and IANs because Russia did not guarantee the debt incurred by Vnesheconombank. Now it assumed that debt directly.
b) *Expanded Cross Acceleration Clauses* by which the Russian Federation committed to include in any new issues clauses to ensure equal status in the event of default/acceleration of the 2010 and 2030s. The clauses would be symmetric, tying default on the 2010 and 2030 to new issues of RF Eurobonds.
c) In order to have these bonds rank pari-passu with other Eurobonds, holders of existing and other new issues of the Russian Federation would *have the right to put back* to Russia at par those bonds, in the event of acceleration of the 2010 and 2030. This repurchase right would expire once Russia issued at least 1 billion of new Eurobonds, as Russia committed to include expanded cross acceleration clauses tied to 2010 and 2030 in new issues.
d) MinFins as domestic debt remained subordinated. By being internal debt, though dollar denominated, they were not legally linked to existing RF Eurobonds.
e) Initially a minimum threshold of 75% of bondholders was needed to consummate the exchange if less than 19 billion was tendered. However, if this happened and Russia wanted to go ahead with the exchange, it had the option open upon requesting consent from creditors to do so.
f) No mention was made to the 95% and 98% collective action thresholds originally established in the terms and conditions of the Prins and IANs. This was considered a "voluntary" exchange, so no formal vote was required.
g) Russia retained the right to retap both the 2010s and 2030s without prior notice. This was included to allow for additional restructuring of FTO paper, and did not work against the deal. [41]

Table III.1

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Due	Coupon		Date of default	Exchanged for:	Amount issued (in millions)	Curr.	Coupon		Exchange announ.	Exchange compl.	1st settle date	Interest accrual date	1st coupon	% exch.
				Rate	Period.					Rate	Period.						
Prins	22,200	USD	Dec-20	6MO LIBOR + 81.25 bps	S/A	Dec-2-98	Cash (9.5%) + 2010 Eurobond	2,800	USD	8.25	S/A	Feb-11-00	Aug-17-00	Aug-25-00	Mar-31-00	Sep-30-00	100%
Ians	6,800	USD	Dec-15	6MO LIBOR + 81.25 bps	S/A	Jun-2-99	and 2030 Eurobond	18,200	USD	step up (2.25 to 7.5)	S/A	✔	✔	✔	✔	✔	
Minfin III	1,322	USD	May-99	3	ANN.	May-14-99	2007 Minfin VIII or 2003 OFZ	1,322	USD	3	S/A	Feb-1-00	Jun-29-00	Feb-1-00	Nov-14-99	May-14-00	100%
								8,198	RUB*	step down (15 to 10)	S/A					May-24-00	

* Exchanged at an exchange rate of 26.2
Source: Bloomberg.

Box. Details of the Prins and IANs exchange

In exchange for Ians and Prins and past due interest on Ians and Prins, bondholders were offered a 2010 and a 2030 Eurobond and cash. The 2010 Eurobond was issued to pay past due interests on Prins and Ians. The

[41] FTO paper corresponds to unsecured and uninsured foreign exchange assets of Foreign Trading Organizations had as FX denominated deposits at Vnesheconombank and hence originally London Club eligible.

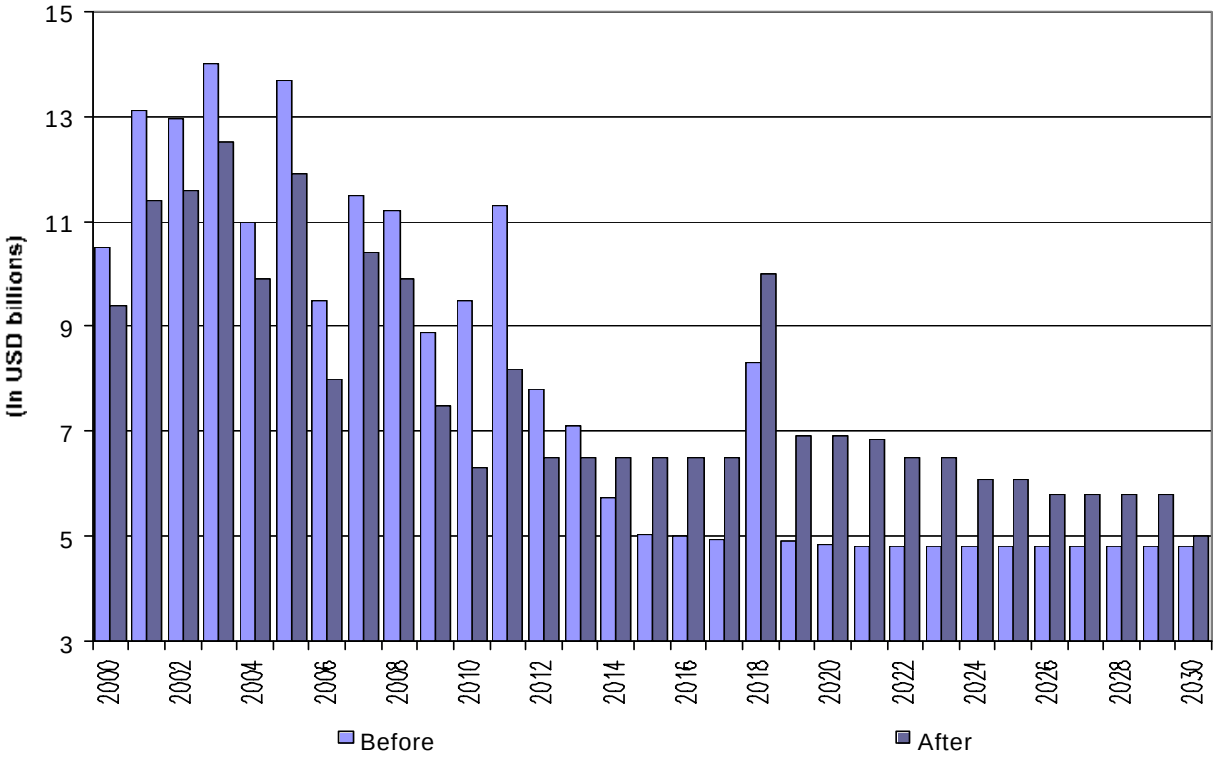
interest due amounted to US$ 2,800 billion. US$2,250 million corresponded to Ians and US$550 million to Prins. 9.5% of this (US$266 million) was paid in cash. The remaining $2,534 million were issued as a 2010 Eurobond. The original issue of Ians and Prins was of US$29 billion (22.2 in Ians and 6.8 in Prins). The 2030 Eurobond was exchanged for the Ians and Prins after a debt write-off of 37.5% for Ians and 33% for Prins. So, the original US$22,200 million in Ians became US$13,875 million of the new 2030 Eurobond and the US$6,800 million in Prins were converted to US$4,556 million of the new bond.

For example, for each US$100 in nominal value of Ian, the bondholders received: 95 cents in cash, US$9.2 of nominal value in the new 2010 Eurobond and US$62.5 of nominal value in the 2030 Eurobond.

For each US$100 in nominal value of Prin, the bondholders received: 78 cents in cash, US$7.3 of nominal value in the new 2010 Eurobond and US$67 of nominal value in the 2030 Eurobond.

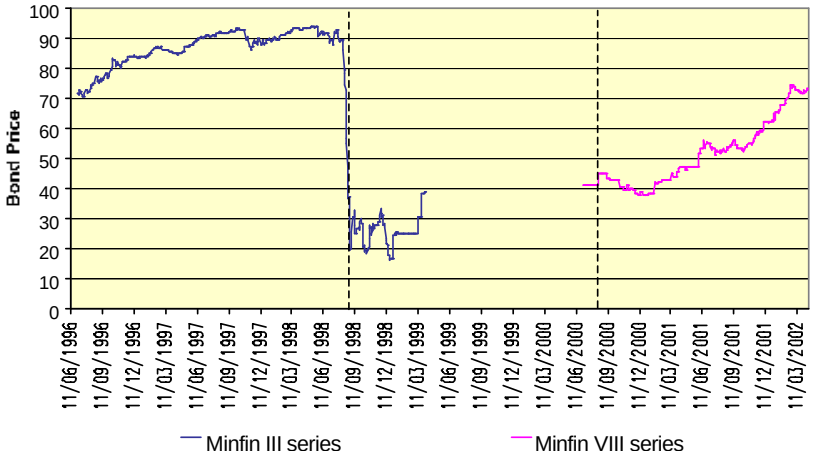
Figure III.3 shows the reprofiling of Russia's debt as a result of the deal. London Club members have argued for reverse comparability, by which the Paris Club should grant a similar debt write off. The deal was viewed as a turning point. Figure III.4 and Table III.2 show how investors fared prior and after the deal. Together with an improving fiscal situation, the economy started recovering relatively fast. The economy grew 5.4% in 1999 and 8.3% in 2000. As assets prices recovered, Russia became the star performer among the emerging market class.

Figure III.3. Russia: Debt Service Profile before and after exchange



Source:

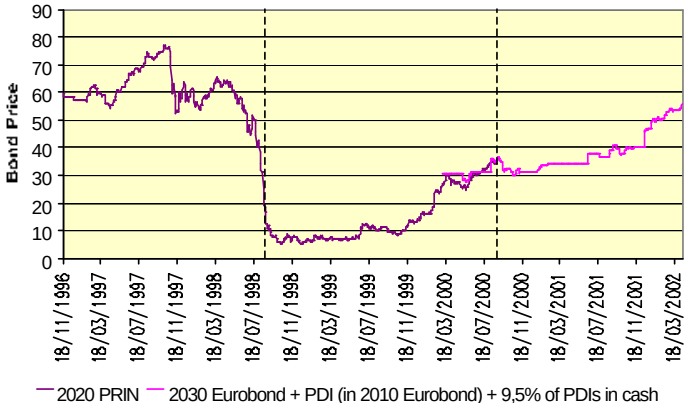
Figure III.4. Russian Bond Exchange
a. Domestic Debt



Source: Bloomberg and author's computations.

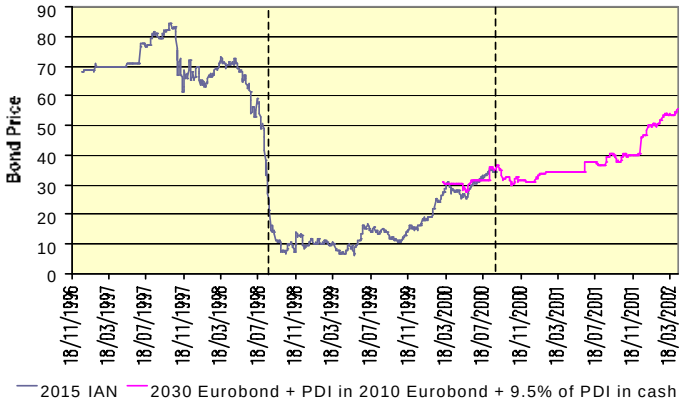
b. Foreign Debt

b.1. PRINS



Source: Bloomberg and author's computations.

b.2. IANS



Source: Bloomberg and author's computations.

Table III.2

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Price 6 months before Default	Price Month before Default	Price day after Default	Price Week Before Announc.	Price Week After Announc.	Price at completion	Face Value Write-off	Exchanged Bond/Cash Mix Value at first settle date	Value 6 Months after completion	Value 6 Months after / Price 6 Months Before	Value 6 Months after / Price Month Before
Prins	22,200	USD	57.8	8.6	6.8	17.5	24.3	35.0	-37.5	35.8	38.5	0.67	4.46
Ians	6,800	USD	12.8	7.8	9.6	20.4	24.9	35.5	-33	36.5	39.2	3.05	5.04
Minfin III	1,322	USD	21.0	39.0	---	---	---	---	0	44.7	42.7	2.03	1.09

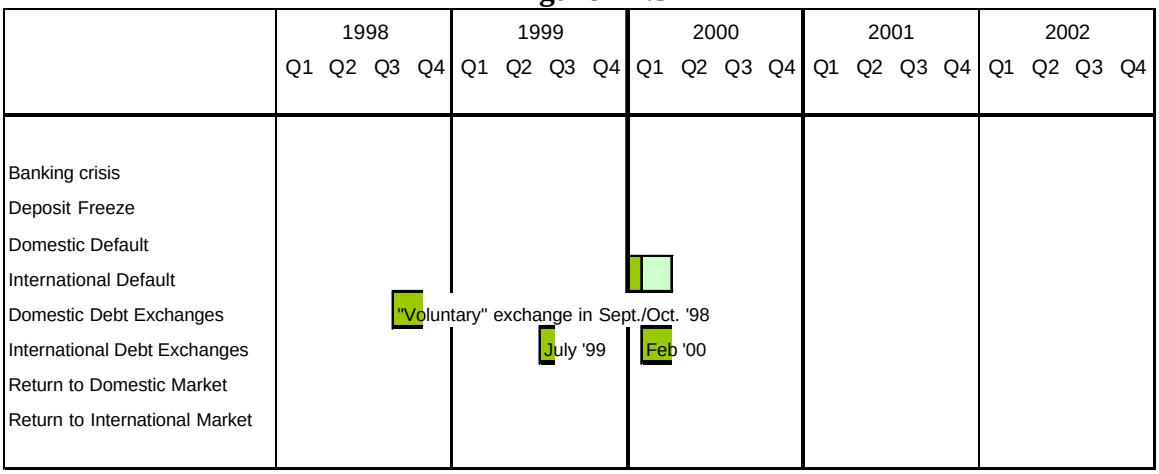
Source: Bloomberg and author's computations.

Box. Chronology of Russia's Restructuring

1989: Demise of Soviet planning.
1991: The new government defaults on Soviet era debt.
1992: January: prices are freed and consumer prices increase 2500%.
1993: The Ministry of Finance issues five dollar denominated MinFin bonds.
1995: March: a Standby Facility of the IMF with monthly conditionality is approved. Exchange rate used as nominal anchor.
1996: The GKO/OFZ ruble denominated securities market is organized by the Bank of Russia as an agent of the Ministry of Finance. In March the IMF approves an EFF. In April the Paris Club accepts to restructure 40 billion of Soviet era debt.
1997: The London Club agrees to restructure Soviet era debt into two securities: 22 billion of principal notes (Prins) and 6 billion of interest arrears notes (IANs). Sharp fall in oil prices.
1998:
July 20: The IMF approves a financial aid package to avert default and devaluation. A first tranche of $4.8 billion (of a $11.2 billion program) was made available to replenish depleted Central Bank reserves. The IMF demands austerity measures to release additional tranches.
August 17: Russia widens the ruble-dollar exchange rate corridor and defaults on domestic and foreign debt.
August 18: Moody´s Investors Service downgraded its ratings on all Russian corporate debt issuers.
August 23: Yeltsin dismisses the Prime Minister Sergei Kiriyenko and negotiations to restructure public debt collapse. Depositors panic.
August 24: Inkombank and National Reserve Bank formed an alliance known as the "Gazprom Syndicate".
August 25: Government announced how it intended to restructure defaulted GKO Treasury bills.
August 31: The Duma rejects Viktor Chernomyrdin as prime minister. Yeltsin submits his nomination again.
September 7: The Duma rejects Viktor Chernomyrdin for a second time.
September 11: The Duma accepts Yevgenny Primakov as prime minister.
September 14: the Central Bank issued three series of short-term zero-coupon bonds (KBOs) and exchanged them for frozen GKOs and OFZs in the hands of a few selected Russian commercial banks.
December 2: Vnesheconombank missed a 362 million payment on its Prins
December 19: The London Club voted not to call in its loans.
1999:
May 14: MinFin3 was defaulted.
June 2: Vnesheconombank missed a payment on the IANs.
July 28: The IMF approves 17-month $4.5 billion Standby agreement to support the government's 1999-2000 economic program. Seven equal disbursements of $640 million.
August 1: Paris Club agreement reschedules $8.1 billion Soviet-era debts that were due in 1999-2000.
December 31: Yeltsin resigns. Replaced by Vladimir Putin.
2000:
February 11: London Club forgives 36.5% of Russian Soviet-era commercial debt.

b. Ukraine[42]

Figure III.5



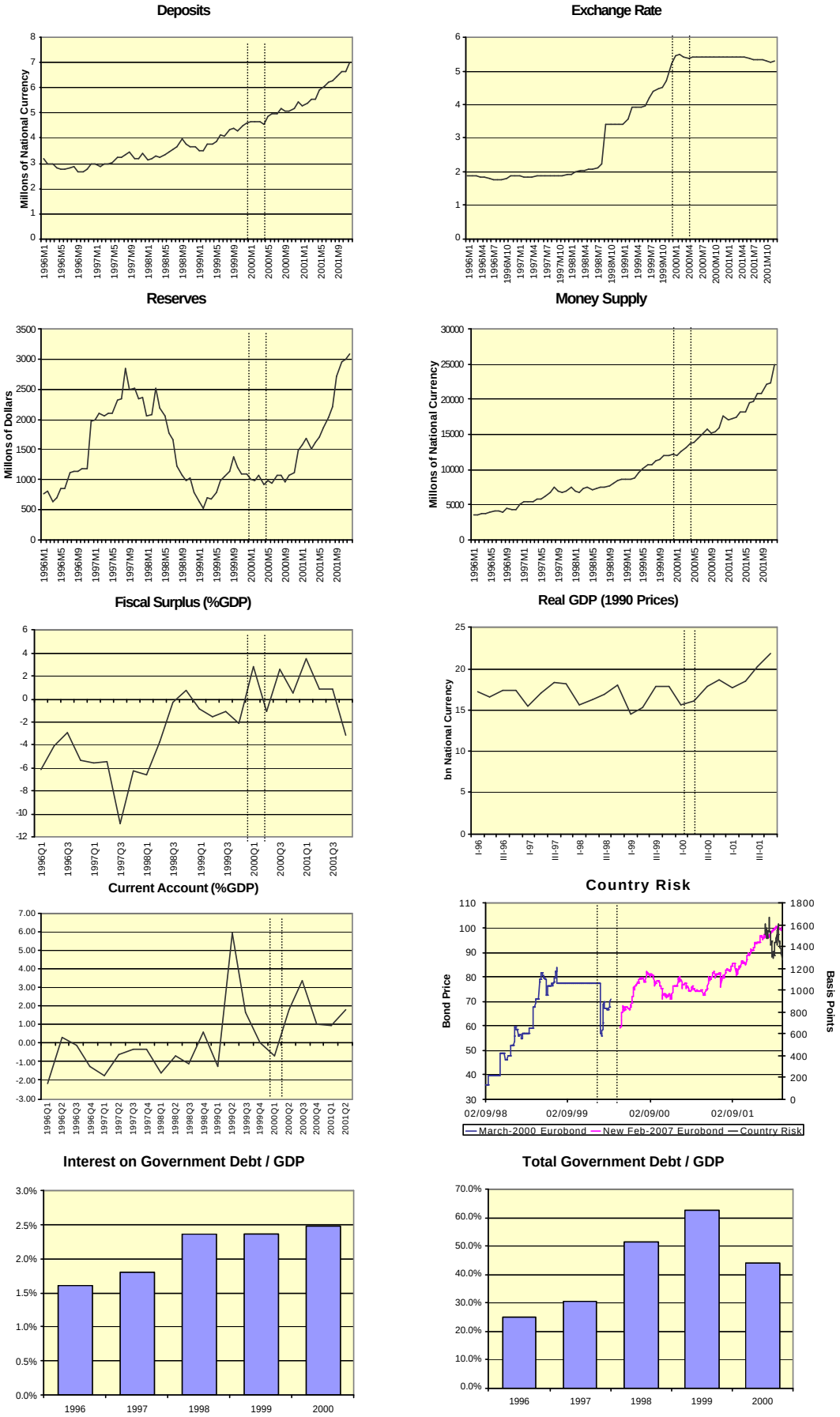
In 1989 the collapse of the Soviet Union forced Ukraine's bureaucracy and political establishment to deal with economic issues that had been irrelevant during the period of Soviet control. While learning what macroeconomic policy was about, it issued and retired two currencies, suffered a hyperinflation, tinkered with the idea of dollarization, and suffered severe output losses as a result of the slow transition from Soviet planning to a market oriented economy.

During the early 90s Ukraine's budget deficit was burdened by subsidies for non-competitive industries. These deficits were financed by a combination of sources, which changed from year to year. Borrowing from the Central Bank, assistance from international financial institutions and accumulation of wage and pension arrears were usual mechanisms. Eventually the issue of Treasury-bills both to domestic and international investors as well as to the Central Bank became an additional important source.

As a result Ukraine's debt increased considerably, jumping from about 10% of GDP to around 20% between 1995 and 1997. During these years the debt also suffered an important qualitative transformation. While most of Ukraine's debt was public, the relation between bilateral, multilateral and private creditor sources changed dramatically. In 1993 most of Ukraine's debt was of a bilateral nature (mostly to the Russian Federation) but by 1997 bilateral debt was only 40% of the total. In the meantime most issues had been to private creditors. The major buyers included offshore hedge funds and investment banks (among them Merrill Lynch, Warburg Dillon Read, ING Barings and CSFB). All new T-bill issues were easily oversubscribed. OVPDs, as Ukraine's short-term instruments were known, had none of the foreign ownership restrictions that had complicated the Russian GKO market, and were one of the few ways to gain exposure to

[42] For a description of this case see also Eichengreen and Rühl (2000) and Lipworth and Nystedt (2001). This material has in part been reconstructed with information from the Ukrainian-European Policy and Legal Advice Centre (UEPLAC).

Figure III.6. Ukraine's Macro Trends



Source: IMF and Bloomberg

Ukrainian credit risk. Even without a rating from a credit rating agency, and even having defaulted on its debt owed to Russia, Ukraine was able to entice foreign lenders into this local currency denominated bond.

In 1997, markets seemed to believe the situation was sustainable. In that year alone more than $1 billion poured into Ukraine's short-term treasury-bill market, and by mid-year foreigners held more than half of all outstanding government debt. This situation should not be surprising, interest payments were just 2% of GDP and with debt to GDP ratios of 30%, no debt profile could generate real problems. However, all this would change suddenly the following year.

The Russian Crisis

With the Russian financial crisis, the market for government debt dried up, and the government had to rely increasingly upon credits from international financial institutions, especially the IMF and the World Bank.

The deterioration of the Russian market, an essential market for Ukrainian products (Russia absorbed about a quarter of Ukraine's exports), necessarily produced a drop in Ukrainian exports and mounting pressure on the foreign exchange. Ukraine's reserves had ran down from $2.4 billion at the beginning of 1998 to $800 million at the beginning of September, as a result of mounting uncertainty regarding the future of the hryvnia.[43]

In spite of earlier statements by government officials indicating that the exchange rate could be maintained, due to the reserves drain, on September 4 the National Bank of Ukraine (NBU) moved the fluctuation band for the hryvnia from between (1.85, 2.25) Hrn/USD to (2.5, 3.5) Hrn/USD. Foreign exchange market restrictions were imposed. A 50% (increased to 75% three days later) surrender of export proceeds was imposed and margins between the official exchange rate and the bank rate were not allowed to exceed 10% (decreased to 5% three days later). Advance payments on imports were forbidden. Banks lost their permission to give residents credits in foreign currency and their ability to purchase foreign currency was severely restricted. The NBU closed the inter-bank market for foreign exchange, forcing all transactions onto the official market.

In order to save the country from default, stabilize its currency, and avoid further contagion of the Russian crisis, the IMF approved a three-year $2.2 billion Extended Fund Facility (EFF) designed to promote fiscal reform, financial stabilization, and the accelerated development of a market economy. The Board of Directors voted that program on September 4. This credit had monthly conditionalities and disbursements were conditioned on Ukraine pursuing aggressive economic reform, maintaining foreign reserve levels and a low budget deficit. The World Bank also approved credits worth $900 million for specific projects in agriculture, the coal industry, financial reform, and enterprise development, with disbursements tied to sectoral reform and compliance with the requirements of the EFF.

[43] There were allegations that the central bank had engaged in financial maneuvers in 1997 and early 1998 to dress up reserves in order to qualify for IMF credits.

"Voluntary" treasury-bill conversion with the threat of default

In order to face the liquidity crunch, the government proposed a bond exchange, by which all OVDPs bonds would be replaced by two medium term T-bills to be issued in two tranches. An A tranche to be paid off on September 2000, and a B tranche to be paid on December 2000. OVDPs which were subject to repayment by October 23, 1998 were to be exchanged for a corresponding number of A tranche T-bills. Those maturing later were exchanged by B tranche bonds. The interest rate on the new bills was set at 40% for the 1st year, and a floating yield tied to the future 6-month bond yield, exceeding it by 1% for payments in hryvnias. Ukraine's finance ministry and NBU put tremendous pressure on local banks to "voluntarily" accept the restructuring. The affected Treasury bills, 1.1 billion hryvnia ($354 million) in all, accounted for 15% of the assets of Ukraine's banks and virtually all their short-term liquidity. The NBU indicated that all banks participating in the package would be given emergency short term financing to guarantee liquidity if necessary. The banks that refused to participate would not be eligible to receive any emergency financing. However, given the liquidity squeeze it is not difficult to argue that local bankers may have considered that the agreement was likely to benefit them, by making the situation more sustainable for the Ukrainian government.

Foreign bondholders faced a similar "voluntary" conversion of 1.8 billion hryvnia ($600 million) worth of Treasury bills. T-bill holders who had also purchased currency hedges were repaid 20 percent of the amount due up front, with the remainder payable in 2-year dollar-denominated Eurobonds. T-bill holders without currency hedges only received the 2-year dollar-denominated Eurobonds. Both could also choose an hryvnia denominated bond with a 22% hedged annual yield, but this option was virtually ignored by the market. The government established a minimum participation by non-residents of 80% required to carry the operation forward. While a 20% yield appears an attractive offer, outstanding Eurobonds of that maturity were yielding up to 100%, thus the swap was painful but fell short of being confiscatory. The transaction was dubbed "voluntary"; however, Moody's considered that the conditions had been those of a "technical default". However, *de jure* default had been averted.

On September 22, a $70 million T-bill payment fell due. According to a resolution of December 9, 1997, Ukraine agreed to convert to dollars the payments of this specific hryvnia-denominated bond issue. Under the conditions of the EFF Ukraine was not allowed to pay the $70 million from its hard-currency reserves. The IMF was uncomfortable with allowing investors to repatriate their investments using IMF-funds. "*It is important to bring private creditors to the table with borrowers early in the process, in order to avoid a default or a drain on the country's hard currency reserves*," said Patrick Lenain, the IMF's Kiev representative. Eventually, the bond was paid punctually.

On October 20, the government rescheduled $110 million of debt issued originally through Chase Manhattan, paying 25% in dollars immediately and the remainder in two-year Eurobonds with a dollar interest rate of 20%. Chase had initially placed this issue in Middle East markets at 9.21%. The difference in interest rates in just one-year signals the deterioration of Ukraine's liquidity position as a result of the Russian crisis.

In November the government attempted to increase the benefits of buying T-bills by allowing them to be used for payment of taxes or the purchase of enterprises under privatization. However, this measure was ineffective in moving the price of T-bills upwards.

Regent Pacific Group

In February 1999, the NBU established a new official currency exchange band of (3.4, 4.6) hryvnia per dollar. Although the NBU lifted most currency transaction restrictions between March and June (including a ban on advance payment on import contracts) and opened a foreign exchange inter-bank market, some restrictions remained (for example, the mandatory sale of 50% of hard currency revenues).

On May 18 the Ministry of Finance submitted to ING a debt conversion offer, according to which 20% of the 163 million US$ issue, due on June 9 be repaid on schedule, with the remainder swapped for a new international bond with a three year maturity. The government was trying to avoid paying $163 million from its reserves since the reserve target accorded with the IMF would be violated. The IMF would consider the use of such reserves for the bond payment as a violation of its new policy of PSI. However, if the payments were not done Ukraine risked falling in default and triggering cross-default clauses on much of the country's external debt. The bond was mostly held by one investor – Regent Pacific Group– who threatened to invoke cross-default and acceleration provisions if the payment was not done in a timely fashion.

On July 15, the Ministry of Finance and ING Barings reached an agreement by which Ukraine would borrow more from the international bond market in an attempt to pay back the bond in full. The structure of the deal was that 20% of the bond was paid cash, with the remainder exchanged for DMark-bonds. The new bonds for DM538 million were added to an existing DM1 billion international bond, issued in 1998 and due on February 2001, with a coupon of 16%. Ukraine chose to raise the money by increasing the existing bond issue to take advantage of the fact that it was also widely distributed among 5,000 investors.

The contamination of the retail market with speculative accounts was a source of concern at the moment. Analysts were quoted saying, for example, *"you're diluting the 01 bond with speculative accounts, which is going to irritate the retail market*". The deal suggested PSI in its widest possible sense, with retail investors being punished along with professional investors. In fact, the price of the DMark bond fell from trading at 80% of face value to 64% within a week of the announcement of the tagging on of the 500 plus million additional issue.

Bond-exchange with the threat of default

While in early September the IMF board had completed its review and approved the next credit tranche under the 3-year EFF, by early October it decided to halt its aid. According to the Fund, the major reasons for taking this kind of action was the introduction of sunflower export duties and the existence of low tariffs on housing and communal services. However, Stanley Fischer, IMF's deputy director had noted in late June that future payments would depend on successful debt restructuring talks. Thus, one can only wonder how much the need to push Ukraine to a debt restructuring (in order to satisfy new PSI targets) could have played a role in the withdrawal of support.

As the economy moved towards election in mid November (in which Leonid Kuchma was re-elected), the withdrawal of the support of the Fund, led to increasing skepticism as to whether Ukraine would be able to finance its debt; as a result, pressure on the exchange rate market mounted. Reserves started to decline and the exchange rate that had been stable since late July, increased steadily from about 4.5 to more than 5 towards year-end.

In October the Cabinet of Ministers drafted the budget for 2000, including for the first time a primary fiscal surplus. On December 22, Victor Yushenko, former head of the NBU, and known reformist was proposed by the President for the post of prime Minister of Ukraine. In his initial address Yushenko stressed the need to strengthen fiscal policy and accelerate reforms.

As of January 1, 2000, Ukraine's foreign debt stood at $12.5 billion, of which $3.1 billion was to be repaid in 2000. The large payments, scheduled both for 2000 and 2001 were the result of the debt restructurings of 1998 and 1999 that had concentrated the restructuring in short term instruments. Otherwise the path of debt looked relatively manageable.

With this in mind, Ukraine decided to move ahead in the restructuring of its debt. In January 2000, Ukraine decided not to make the principal payment on one of the Eurobond issues. On February 4, Ukraine launched a comprehensive exchange offer involving four different Eurobonds and the "Gazprom" bonds maturing in 2000 and 2001. The bonds were a DM1.5 billion, 16% Eurobond due February 2001; a 500 million euro, 14.75% Eurobond due March 2000; a $74 million, 16.75% Eurobond due October 2000; and a $258 million zero-coupon Eurobond due September 2000. The Gazprom bonds corresponded to debt owed by Ukraine to the Russian gas company Gazprom. The DM bond was governed by German law and did not include collective action clauses. The remainder three bonds were governed by Luxembourg law and included collective action clauses allowing investors holding a qualified majority of principal to modify the payment terms. The details of the Eurobonds exchange are in Table III.3.

Table III.3

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Due	Coupon		Date of default	Exchanged for:	Amount issued (in millions)	Curr.	Coupon		Exchange announ.	Exchange compl.	1st settle date	Interest accrual date	1st coupon	% exch.
				Rate	Period.					Rate	Period.						
Eurobond	1,538	DEM	Feb-01	16	ANN.	21-Ene-00	11% 2007 Eurobond or 10% 2007 Eurobond	1,129 / 1,133	USD / Euros	11 / 10	quartly. / quartly.	04-Feb-00	Apr-7-00 / Apr-11-00	Apr-14-00	Mar-15-00	Jun-15-00	96%
Eurobond	500	Euros	Mar-00	8.5	quartly.	✔						✔		✔	✔	✔	
Eurobond	74	USD	Oct-00			✔						✔	---	✔	✔	✔	
Eurobond	258	USD	Sep-00			✔						✔	---	✔	✔	✔	

Source: Bloomberg and author's computations.

Owners of all bonds were offered a 7-year coupon amortization bond denominated either in euros or U.S. dollars. In the euro denominated bond coupon was set at 10%, while in the U.S. dollar denominated bond it was set at 11%. Along with ING Barings, which was the restructuring lead manager, the exchange of the bonds was to be carried out by a syndicate, which comprised Commerzbank, Credit Suisse First Boston and Salomon Smith Barney acting as co-lead managers. Coupon payments for the new bonds were set on a quarterly basis, with no grace period for interest payments. The average duration of the bonds was 4.5 years. When exchanging, investors would be able to choose the currency in which their bond would be nominated.

In order to help to avoid holdouts, Ukraine decided not to make a principal payment falling due on one of the bond issues in January 2000 and a coupon payment falling due on another bond issue in February 2000. As the grace period for both payments expired during the period that the exchange offer was open, Ukraine was temporarily in default during the debt exchange, and was as a result exposed to the risk of litigation.

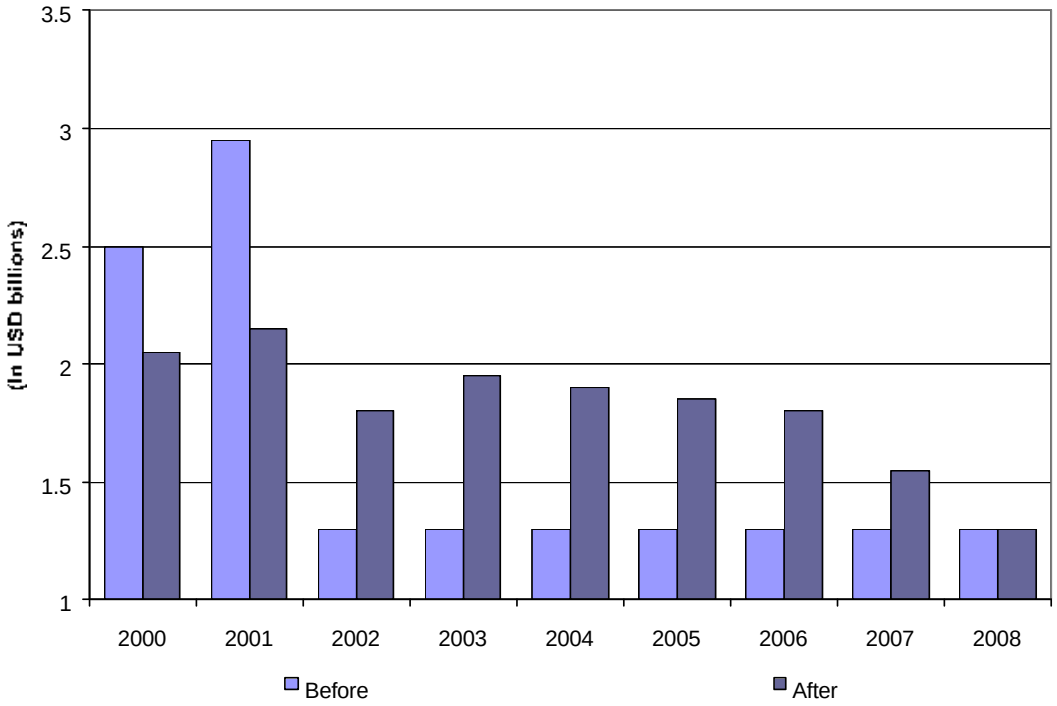
Three of Ukraine's bonds were held by a relatively limited number of investment banks and hedge funds. Thus, the government could establish a dialogue to gauge what conditions would be acceptable to creditors. The proposal of one fund manager to use litigation to block progress did not attract the support of other investors.

The proposal was open through March 15, 2000. In the end 99% of the old bonds were tendered in the exchange. The exchange offer included a minimum overall participation threshold of 85%, so as to guarantee that the lead manager would be able to bring most of bondholders to the negotiating table. Moreover, Ukraine made use of the collective action clauses (CACs) contained in four of its five debt instruments. A condition for accepting the exchange was for holders of these bonds to give their votes to an exchange agent who would act as their proxy at a bondholders' meeting, and thereby bind in any non-participating holders (providing the requisite thresholds were reached). The CACs are thought to have contributed to achieving such high acceptance levels.

Specifically, the mechanism was that investors holding instruments with CACs were invited to tender their instruments, and at the same time to grant an irrevocable proxy vote

to be cast at a bondholder meetings. To ensure that the proposed amendments to the payment terms of the original instruments would be adopted at bondholder's meetings, the authorities predicated the calling of such meetings upon the receipt of sufficient irrevocable proxies. Following the meeting that modified the payments terms of the original instruments bondholders tendered the modified instruments in the exchange for the new issues with the same payment terms.

Figure III.7. Ukraine: Debt Service Profile before and after exchange



Source:

Market comments stressed the fact that the restructuring entailed no debt stock write off as a key reason for participation. The exchange offer also included 220$ million cash out of accrued interest. Figure III.7 shows the new debt profile after the exchange.

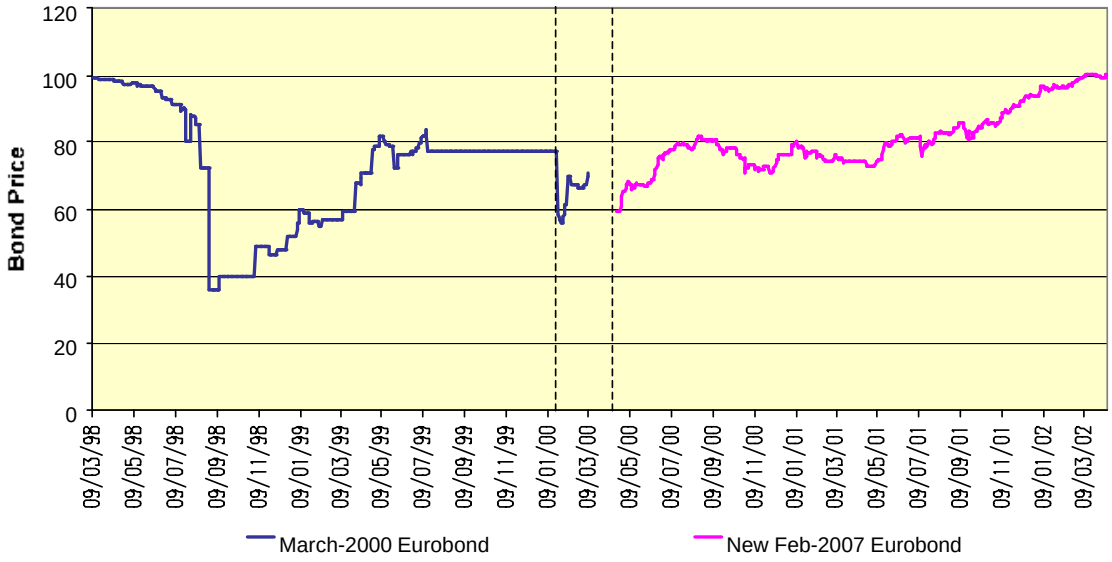
After the exchange

After the exchange Ukraine consistently advanced on a series of structural reforms that slowly consolidated its fiscal solvency and its path for reform. It moved decisively to work for integration with the EU in the medium term. As a result, and after substantial disagreement over the budget throughout the year, on December 20, 2000, the IMF approved a resumption of the Extended Fund Facility approved in September 1998. Throughout the year most macroeconomic variables had moved in the right direction. Bank deposits had recovered significantly growing 53% in 2000, output recovered steadily starting in QI, and international reserves, which had suffered with the withdrawal of the Fund support had recovered and increased dramatically towards year-end. All these trends strengthened in 2001.

On July 13, 2001, Paris Club members agreed to a debt restructuring, consolidating roughly $580 million due on loans contracted by Ukraine before December 1998. The amount consisted of principal arrears and maturities due from December 2000 to September 2002. The rescheduling was for credits to be repaid over 12 years, with 3 years of grace, in 18 equal and successive semi-annual payments.

Since then Ukraine has remained current on all its payments.

Figure III.8. Ukrainian Bond Exchange



Source: Bloomberg and author's computations.

Table III. 4

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Price 6 months before Default	Price Month before Default	Price day after Default	Price Week Before Announc.	Price Week After Announc.	Price at completion	Face Value Write-off	Exchanged Bond/Cash Mix Value at first settle date	Value 6 Months after completion	Value 6 Months after / Price 6 Months Before	Value 6 Months after / Price Month Before
Eurobond	1,538	DEM	---	---	50	55.5	67.0	81.5	0	---	---	---	---
Eurobond	500	Euros	82.4	77.5	58.4	55.9	67.3	---	0	60.1	83.9	1.02	1.08
Eurobond	74	USD	---	---	---	---	---	---	0	---	---	---	---
Eurobond	258	USD	---	---	---	---	---	---	0	---	---	---	---

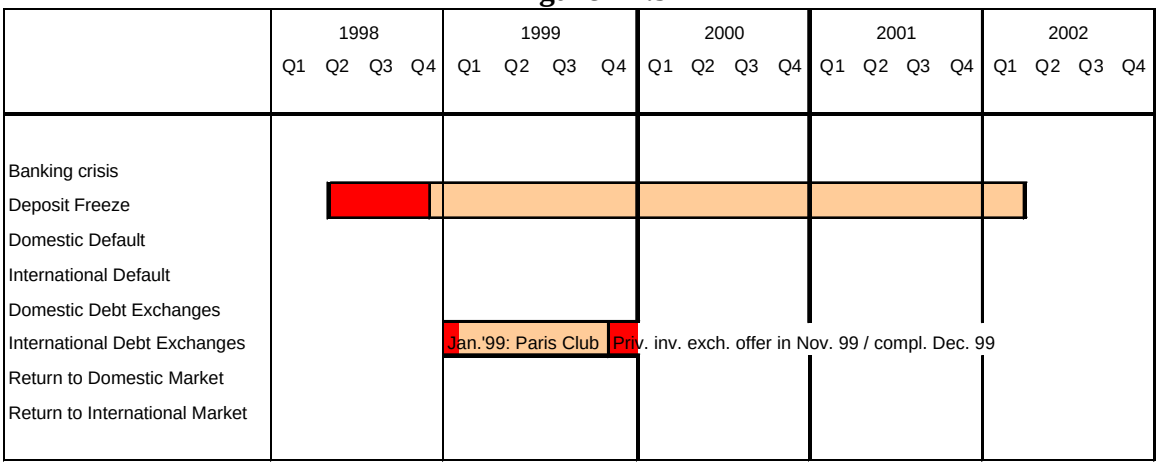
Source: Bloomberg and author's computations.

Box. Chronology of Ukraine's Restructuring

1989: Soviet Union collapse
1995: A new currency, the hryvnia, is introduced
1997: More than $1 billion pours into Ukraine's short-term treasury-bill market. Interest payments are just 2% of GDP with a debt to GDP ratio of 30%.
1998:
August: Russian financial crisis
September 4: The NBU establishes a new official exchange band range of 2.5 to 3.5 hryvnia per dollar. Exchange restrictions are imposed. IMF approves three-year $2.2 billion EFF.
September: Ukraine restructures approximately $1 billion in short-term T-bills. Moody's considers this a "technical default". However, *de jure* default is averted.
September 22: A $70 million T-bill payment is due. Under the conditions of the EFF Ukraine is not allowed to pay the $70 million from its hard-currency reserves. Eventually, the bond is paid.
October 20: The government reschedules $110 million of debt issued originally through Chase Manhattan.
1999:
February: The NBU establishes a new official currency exchange band range of 3.4 to 4.6 hryvnia per dollar. Some restrictions are lifted.
Between March and June: The NBU lifts most currency transaction restrictions and opens a foreign exchange inter-bank market.
May 18: the Ministry of Finance submits to ING a debt conversion offer to avoid paying $163 million of a bond (held mostly by The Regent Pacific Group) from its reserves since the reserve target accorded with the IMF would be violated.
June: Stanley Fischer notes that future payments will depend on successful debt restructuring talks.
July 15: Ukrainian government reschedules part of the approximately $160 million dollar sovereign debt due to foreign investors.
Early September: the IMF board completes its review and approves the next credit tranche under the 3-year EFF.
October: Early during the month the IMF decides to halt its aid. Budget draft for 2000 with a primary fiscal surplus for the first time.
November: Leonid Kuchma is re-elected. Reserves start to decline. The exchange rate (stable since late July) increases steadily from about 4.5 to more than 5 towards year-end.
December 22: Victor Yushenko is proposed by the President for the post of prime Minister of Ukraine.
2000:
January: Ukraine decides not to make the principal payment falling due of one of the bond issues.
February 4: Ukraine launches a comprehensive exchange offer involving four different Eurobonds and the "Gazprom" bonds maturing in 2000 and 2001. 99% of the old bonds were tendered in the exchange.
March 15: Closing of the debt exchange.
December: IMF approves extension to the EFF.
2001: July 13: Paris Club members agree to do a debt restructuring.

c. Pakistan[44]

Figure III.9



In spite of having sustained significant growth rates during the last three decades, extremely lax fiscal policy led to an explosive growth in the Pakistan's debt. By 1998 interest payments used over 40% of tax revenues. In addition to the excessive government expenditures and stagnant tax revenues, the high returns on government securities and the inappropriate sequencing of financial reforms, led to a bludgeoning debt profile. On the external front, large current account deficits, stagnant exports revenues and declining worker remittances, were moving Pakistan, at the end of the 90s, towards an unsustainable situation.

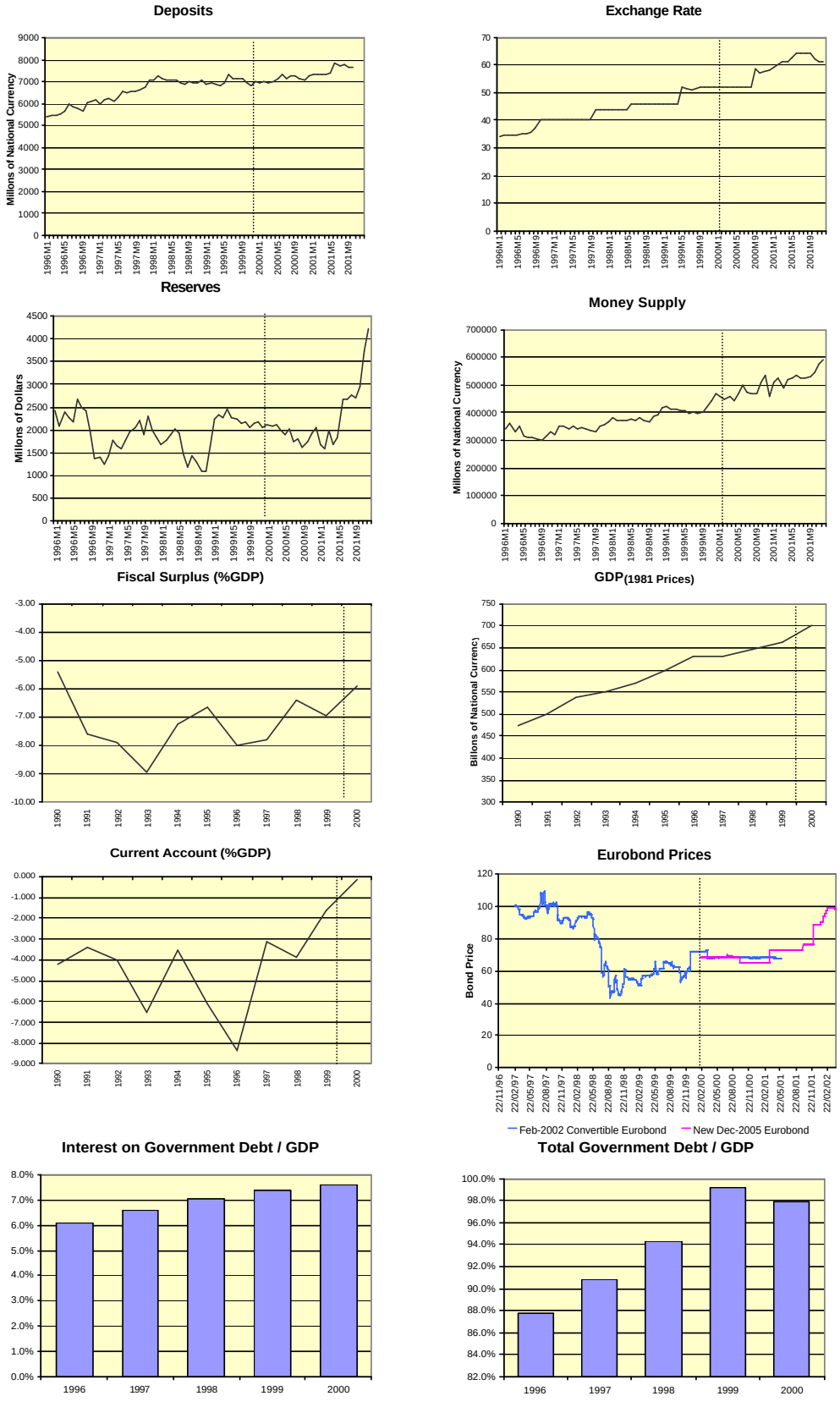
Crisis

In the early 90s, Pakistan had significantly liberalized foreign exchange controls. The rupee had become fully convertible and both individuals and firms were allowed to hold foreign currency bank accounts and freely move foreign currency into and out of the country. Foreign firms investing in Pakistan (other than banks and insurance companies) were allowed to send abroad profits and capital remittances without prior approval.

At the end of May 1998, things turned sour. The crisis was triggered by a number of factors, including the suspension of the IMF program, and negative international reaction and sanctions to a series of nuclear tests. Fearing capital outflows, on May 28 the Government froze all foreign currency accounts (FCAs), which amounted to nearly $11 billion or about 16% of GDP, with a compulsory conversion at PR46/$ upon withdrawal. As a result, private sector remittances ceased, thus cutting off about $2.5 billion of inflows projected for that year. Later on, the government restructured these deposits by offering five-, seven- and ten-year dollar bonds. New foreign currency accounts with fresh foreign exchange inflows were permitted.

[44] This material has in part been reconstructed using information from the IMF and Burki (2000).

Figure III.10. Pakistan's Macro Trends



Source: IMF and Bloomberg.

As the two sources of foreign exchange borrowing: official sources and private transfers suddenly dried up, Pakistan started experiencing a sizable loss of reserves. Between April and July reserves plummeted over 40%. On July 14, Pakistan's long-term foreign currency credit rating was downgraded by S&P from B- to CCC. On July 22, the government introduced a two-tier exchange rate mechanism comprising an official rate (PR46/$) and the floating inter-bank rate (FIBR) (PR52/$). Suppliers into the FIBR market included exporters, home remittances from overseas workers, and invisible flows. The demand included "non-essential" imports and other outflows that did not have access to the official rate.

In July 1998, Pakistan began to accumulate arrears on its foreign debt obligations. By late November 1998, with negotiations for a resumed IMF program and other IFI lending unresolved, Pakistan had accumulated over $1.5 billion of arrears and stood on the edge of general payments default. At this point official foreign exchange reserves had fallen to just above 1 billion.

In January 1999 the economy stabilized thanks to the approval by the IMF of an Enhanced Structural Adjustment Fund/Extended Fund Financing (ESAF/EFF) program. This allowed strengthening the foreign exchange reserves position, which would remain relatively strong throughout the year. In January an agreement was also reached with Paris Club members. The amount of debt relief reached $3.3 billion and applied to public and publicly guaranteed debt contracted prior to September 1997 and falling due between January 1, 1999 and December 31, 2000. The official development assistance (ODA) loans were rescheduled for 18 years with a 3-year grace period. However, the Paris Club imposed the requirement that Pakistan should look for a similar debt relief from private investors under the comparability of treatment principle.

On May 19 the government unified the exchange rate after a yearlong period of gradual transition, but the resolution on the debt front remained delayed as the government feared a reputational backlash if it pursued any sort of debt relief. On October 12, a new military government took office, precipitating events. With the military coup, trading of bonds practically ceased, rollover became very difficult and the exchange became unavoidable.

On November 15, Pakistan launched a voluntary debt exchange in line with its previous commitments to the Paris Club. The exchange involved swapping three dollar-denominated Eurobonds (a $150 million, 11.5% due in December 1999; a $160 million 6%, convertible, due in February 2002 with a put in February 2000; and a $300 million floating rate note due in May 2000) for a new amortizing bond with an overall maturity of six years, three-year grace period, paying a 10% coupon at a face value of $585 million. Table III.5 shows the details.

Table III.5

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Due	Coupon		Date of default	Exchanged for:	Amount issued (in millions)	Curr.	Coupon		Exchange announ.	Exchange compl.	1st settle date	Interest accrual date	1st coupon	% exch.
				Rate	Period.					Rate	Period.						
Eurobond	150	USD	Dec-99	11.5	S/A							Nov-15-99	Dec-12-99	Dec-13-99	Dec-13-99	Jun-13-00	96%
Eurobond	300	USD	May-00	6MO LIBOR + 395 bps	S/A		2005 Eurobond	585	USD	10	S/A	✔	Dec-17-99	✔	✔	✔	100%
Conv. Eurobond	160	USD	Feb-02	6	S/A							✔	Dec-6-99	✔	✔	✔	88%

Source: Bloomberg and author's computations.

There was some discussion as to whether Pakistan would invoke Collective Action Clauses in order to secure success in the exchange but they were not used, in the end 99% of all bondholders tendered. Figure III.11 shows the impact on the debt profile. There were several reasons for such a success: the threat of default was credible, the terms offered were attractive and both interest rates and face value entailed significant sweeteners relative to the old instruments. In addition, the new bond would be more liquid than the tendered ones. The fact that the number of bondholders was rather limited was also a critical factor in assuring the success of the exchange. Additionally, a comfort letter from the IMF gave the signal that the multilaterals were behind the proposal, and a substantial upgrade by S&P also contributed.[45] The results for bondholders are described in Figure III.12 and Table III.6.

At the end of 2000, the International Monetary Fund approved a Standby Arrangement in an amount equivalent to $596 million and in January 2001, the Paris Club creditors rescheduled $1.8 billion of debt under no concessional terms.

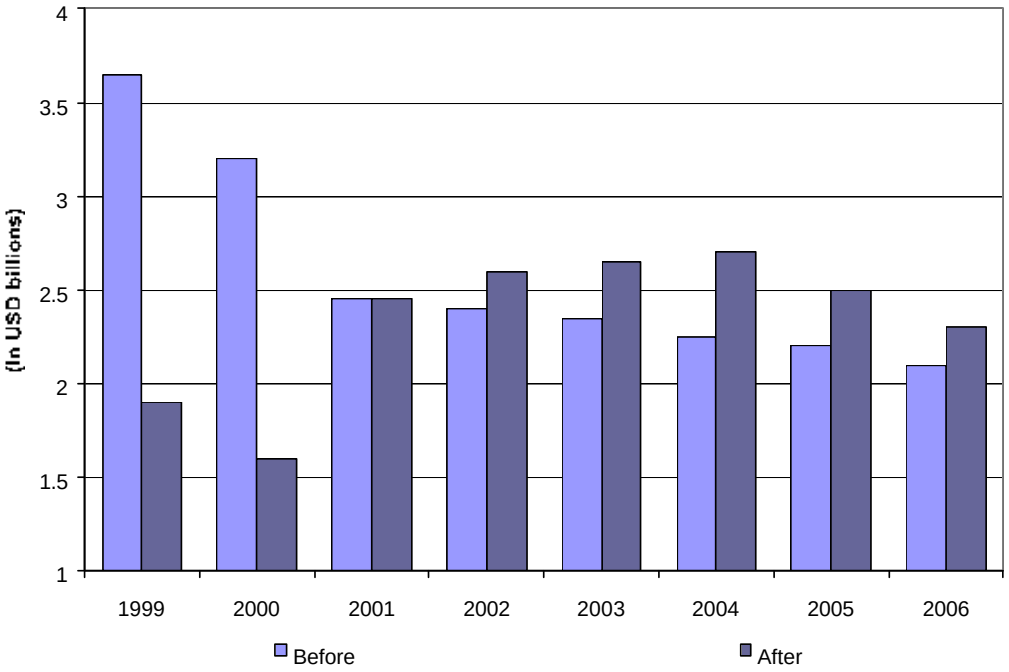
By late 2001 reserves had recovered significantly as a result of large disbursements of foreign grant assistance and repatriation of holdings abroad by Pakistani residents. In early December the IMF approved a 1.3 billion Poverty Reduction Growth Facility (PRGF) further strengthening Pakistan's macroeconomic scenario. Later, in December 2001, the government of Pakistan once again successfully rescheduled its bilateral debt worth $12.7 billion with its creditors in the Paris Club, in the form of extended repayment periods and lower interest rates. The key features of this Paris Club agreement were:

- It dealt with both the total amount of debt and the annual service payments.
- Two-thirds of the bilateral debt (ODA debt) will be rescheduled for 38 years including a 15 years grace period.
- The remaining third (non-ODA debt) will be rescheduled for 23 years including a 5 years grace period.
- Under these new terms, that was unofficially referred to as *Islamabad Terms*, Pakistan saved about $3 billion in debt service payments through 2004.

[45] While the new bond offered not "haircut" in principal, based on a sovereign spread of 1500 basis points at the time of the exchange, the reduction in NPV of the outstanding stock of Eurobonds was about 27%.

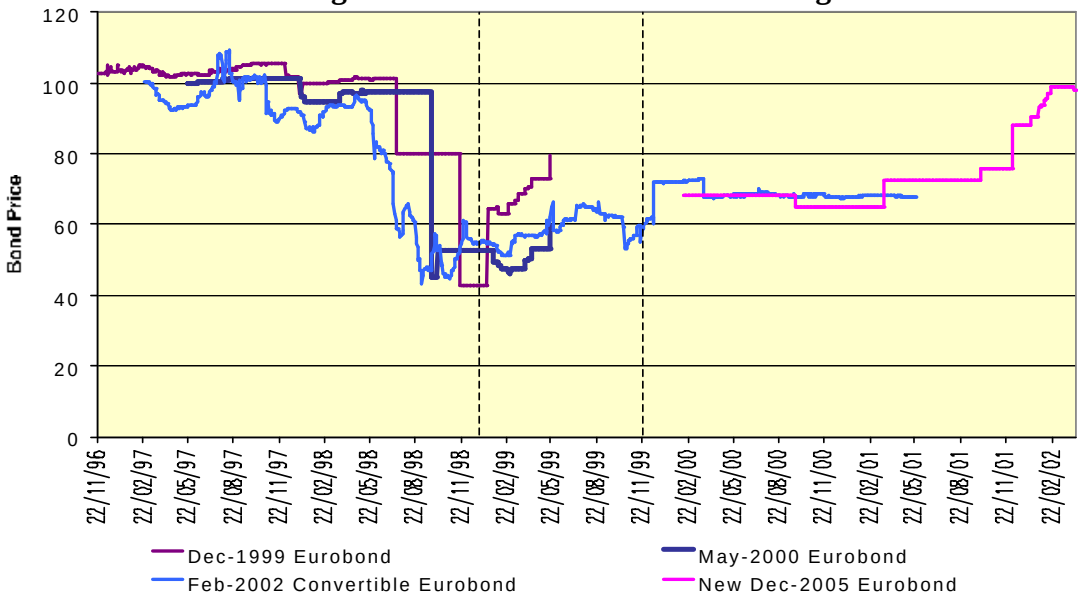
In the previous two Paris Club terms negotiated in 1999 and 2000, Pakistan outstanding bilateral and multilateral debt had been rescheduled under traditional *Houston Terms* by rolling over due payments. However, under this new agreement, a combination of *Houston Terms* and *Naples Terms*[46] was implemented.

Figure III.11. Pakistan: Debt Service Profile before and after exchange



Source:

Figure III.12. Pakistani Bond Exchange



Source: Bloomberg and author's computations.

[46] The last one only available for IDA (International Development Association) countries and under which 67% is written off and the rest is rescheduled for 30 years under 0.5% financing.

Table III.6

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Price 6 months before Default	Price Month before Default	Price day after Default	Price Week Before Announc.	Price Week After Announc.	Price at completion	Face Value Write-off	Exchanged Bond/Cash Mix Value at first settle date	Value 6 Months after completion	Value 6 Months after / Price 6 Months Before	Value 6 Months after / Price Month Before
Eurobond	150	USD	101.1	42.8	64.6	---	---	---	0	---	72.9	0.72	1.71
Eurobond	300	USD	97.6	52.5	49.5	---	---	---	0	---	73.2	0.75	1.39
Conv. Eurobond	160	USD	80.9	56.5	55.36	56.67	58.5	61.43	0	---	72.9	0.90	1.29

Source: Bloomberg and author's computations.

Box. Chronology of Pakistan's Restructuring

1997:

October 20: IMF approves a three-year IMF ESAF/EFF program.

1998:

May 28: After nuclear testing capital flows dry up. Foreign Currency Accounts (FCAs) frozen.

July 14: Pakistan's long-term foreign currency credit rating downgraded by Standard & Poor's from B- to CCC.

July 22: The government introduced a multiple exchange rate system comprising an official rate, a floating inter-bank rate (FIBR), and a composite rate. The official exchange rate continued to tie the rupee to the dollar.

July: New FCAs permitted with fresh foreign exchange inflows. Pakistan's Government made a policy decision to enter technical default with some official creditors by delaying payments and accumulating arrears.

1999:

January 15: Renewal of the IMF ESAF/EFF program.

January 30: Agreement with Paris Club members. The amount of debt relief reaches $3.3 billion. The Paris Club imposes the requirement that Pakistan should look for a similar debt relief from private investors under the comparability of treatment principle.

May 19: The government unifies the exchange rate after a yearlong period of gradual transition.

May 25: IMF completes review and approves US$51 million credit tranche for Pakistan.

October 12: A new military government takes office.

November 15: Pakistan launches an offer to exchange outstanding Eurobonds (due during December 1998 and February 2002) for a new amortizing bond with an overall maturity of six years with a three-year grace period. 99% of all bondholders tender.

2000:

July: Rupee is floated

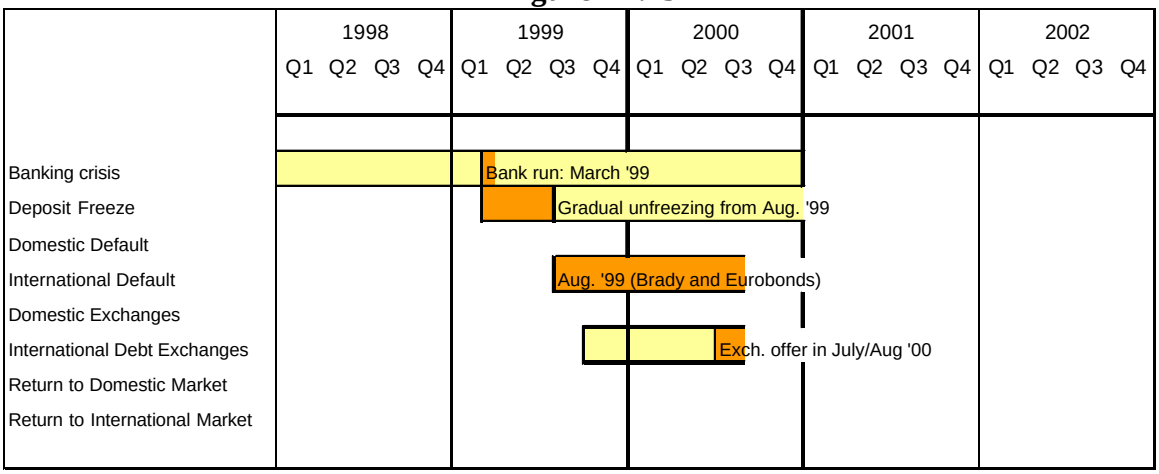
November 29: The IMF approves a Standby Arrangement for $596 million

2001:

January 23: The Paris Club creditors reschedule $1.8 billion of debt under no concessional terms.

d. Ecuador[47]

Figure III.13



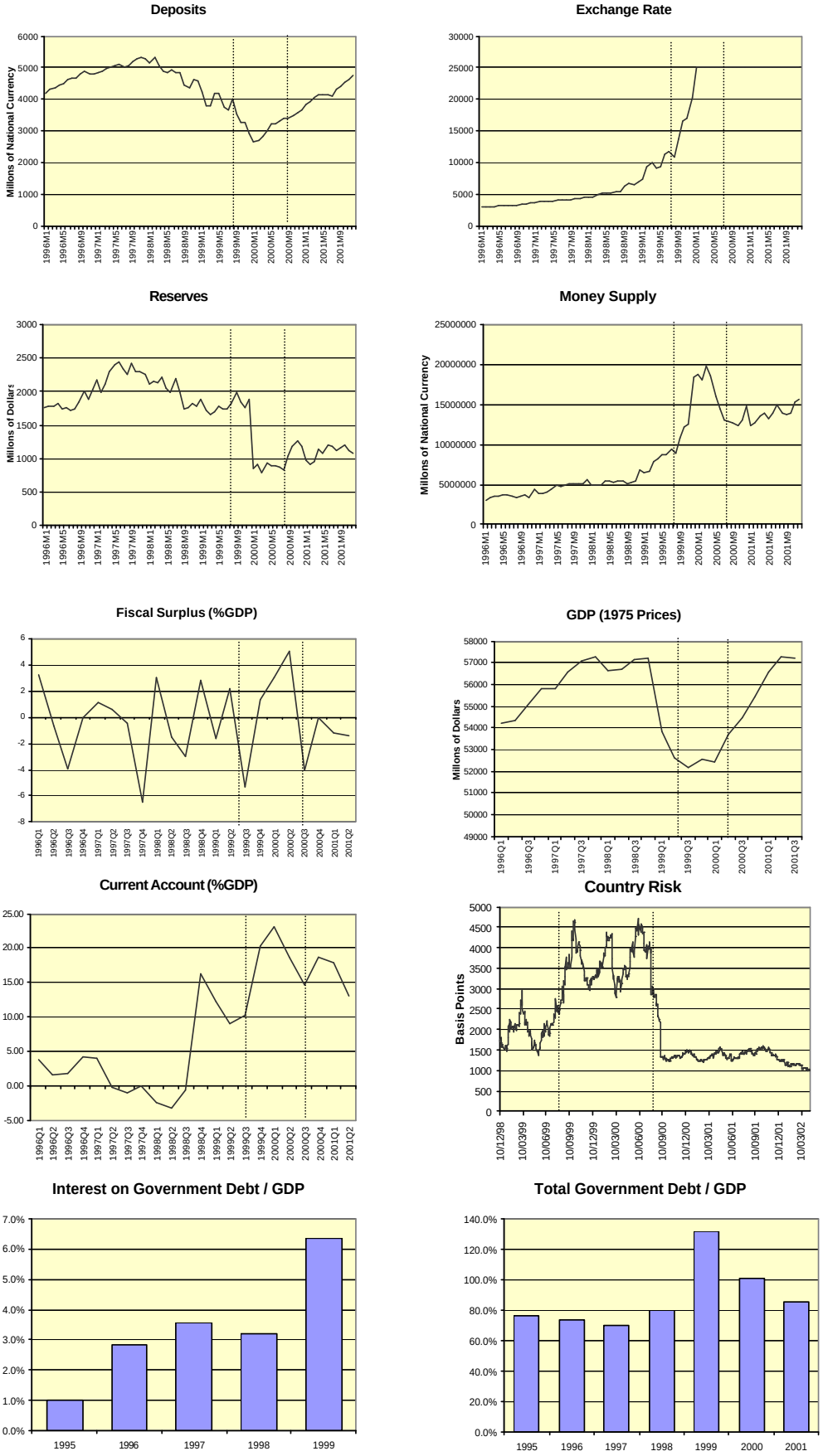
Ecuador was relatively late in reopening access to capital markets, closing negotiations with the Paris Club in 1992 and 1994 and implementing a late Brady deal in 1995.[48] However these agreements were short-lived since Ecuador began to run substantial bilateral arrears starting in 1995.

On February 28, 1995 Ecuador's Brady deal restructured $7.8 billion of debt owed to commercial banks. Ecuador's debt was reduced by $1.8 billion in nominal terms. The menu offered to banks included Discount bonds (which carried a 45% discount), Par bonds with reduced fixed interest rate, Past-due interest (PDI) bonds and interest equalization bonds. As in most Brady deals Discount and Par bonds had a 30-year maturity and 30-year zero-coupon bonds as a collateral for the principal. 15% of the costs of the operation were funded by Ecuador the rest being paid by creditor countries and the IADB. However, Ecuador's Brady was relatively tougher than previous deals that had carried only a 35% discount.

[47] This material has in part been reconstructed from information in Fischer (2000).

[48] The Paris Club agreement of January 1992 granted Houston terms to $339 that consolidated amounts falling due between January 1, 1992 and January 1, 1993. ODA debt resulting from pre-1983 loans, from the 1985 and 1988 agreements, and interest on maturities arising from the 1989 rescheduling were scheduled to be paid along a 20-year period with a 10-year grace. Non-ODA maturities from pre-1983 loans and from the 1985 and 1988 agreements, as well as principal payments on the 1989 rescheduling obtained a 15-year maturity with 8 years of grace. The cutoff date was January 1, 1983. The Paris Club agreement in June 1994 also granted Houston terms to $292 million additional loans.

Figure III.14. Ecuador's Macro Trends



Source: IMF and Bloomberg.

All this was completed under relatively normal macroeconomic circumstances. Starting in 1995, however, things started deteriorating considerably. First Ecuador engaged itself that year in a border war with Peru, increasing military spending and moving the budget into significant deficit. Political instability (the Vice president fleeing to evade corruption charges) led eventually to the election of Abdala Bucaram as president in 1996. However, Bucaram failed to deliver on his populist platform. Discontent led to general strikes and his removal by Congress in 1997. That year El Niño related storms caused severe crop and infrastructure damage, with a total estimated cost of 13% of GDP.

Surprisingly, within this deteriorating environment, Ecuador retained access to the capital markets. In 1997 a Eurobond was placed for 500 million (with maturities of 5 and 7 years). Jamil Mahuad, a moderate politician and successful reformist as mayor of Quito, was elected President in July 1998. However, he also failed to deliver. The budget deficit skyrocketed above 6% of GDP in 1998, the building of arrears with official creditors continued, and a substantial worsening of the financial sector as a lingering cost of the collapse triggered by el Niño anticipated difficult times.

Banking Crisis

The financial institutions law –introduced in 1994- provided the framework for financial liberalization, relying heavily on self-regulation of financial institutions, a relatively weak framework considering that Ecuador had a long history of bailing out problematic banks. For example, in 1981, all dollar-denominated debts had been assumed by the Central Bank in exchange for sucre-denominated debt at a below-market exchange rate. Later, in 1995 and 1996 two insolvent mid-sized banks were helped by the Central Bank through liquidity credits, and one of them (Banco Continental) was ultimately taken over by the Central Bank.

In 1998 three factors contributed to an increasingly serious liquidity problem in the financial sector: the effects of el Niño, the decline of world oil prices, accounting for about 14% of GDP, and the Russian crisis in August. As a consequence of an increase in non-performing loans and the reduction of credit lines, the insolvent Banco de Prestamos was closed in August. At the same time Filanbanco experienced liquidity problems. Between December of the previous year and October 1998 deposits fell 41%.

In December, law created a blanket-deposit-guarantee and a Deposit Insurance Agency (AGD) was established to administer the guarantee and to manage the disposal of assets in closed banks. In the same month the AGD took over Filanbanco.

During the first months of 1999 the Central Bank allowed the exchange rate to float, after using unsuccessfully 250 million in an attempt to stabilize the sucre. A weak fiscal budget, and the increasing liquidity needs required to aid financial institutions prompted the Central Bank authorities to allow the exchange rate to float, in an attempt to preserve the reserves. However, due to the high degree of financial dollarization, the devaluation bankrupted most of the financial sector that had strong balance sheet exposure to a devaluation.

Six small banks were closed but in March Banco del Progreso, the second largest bank, also experienced liquidity problems. Since the AGD did not have enough resources to take over the bank, a one-week bank holiday was decreed between March 8 and March 12, and a deposit freeze was decided on March 11. Demand and saving deposits were frozen for six months and time deposits for one year. Congress decided to extend the deposit guarantee to Banco de Prestamos' depositors, which had been closed before the approval of the law.

Between May and July all private banks were audited by a team of international auditors and classified into three categories: capital compliant ("A"), capital deficient ("B") and negative net worth ("C"). The banks classified as "A" would remain under private control, those classified as "B" would be intervened and those classified as "C" were to be taken over immediately by the AGD. On July 30, 1999 "C" banks were taken over by the AGD and "B" banks were put under a recapitalization program.

On September 30, 1999 Ecuador deferred its payments on Discount and PDI Brady bonds due next day. Ecuador asked investors to use the 30-day grace period to authorize the release of interest collateral on its Discount bonds so as to stay current on its obligations. Ecuador also offered to pay the coupon on the PDI bonds, which did not have collateral. International investors disliked this unequal arrangement since it favored Ecuadorians, who owned mostly PDI bonds. But most striking to the international financial community was the default on a Brady bond. These bonds had been designed to be inviolable in any future sovereign workouts. Cross default clauses, acceleration, and other specifications discussed in Chapter II, had built the belief that Brady bonds were impossible to default upon. This belief had suddenly been shattered.

Bondholders, led by Gramercy Advisors decided to fight back and force acceleration for which a vote of only 25% was needed, however no lawsuits were filed. On October 28, Ecuador also defaulted on its Eurobonds and unilaterally rescheduled domestic dollar-denominated debt.

Further liquidity problems developed in the banking sector forcing the AGD to take over three large banks that had previously been classified as "B". The financing needs of the government running a deficit close to 6% of GDP, and the financing needs of the financial sector, led to a massive deprecation of the sucre. At the end of the day, the cost of the banking crisis was estimated at 20% of GDP.

Dollarization

On January 9, 2000 President Mahuad announced his intention to dollarize the economy, i.e. adopting the US dollar as legal tender, to halt the banking and currency crisis. However, this announcement came in too late; on January 21 Mahuad was ousted by a civilian-military coup. The new administration of President Noboa (formerly Mahuad's vice-president) decided, however, to continue with dollarization and strengthen fiscal reform. This was achieved by *The Economic Transformation Law* that introduced dollarization and had three key features:

- Prohibition to issue sucres.
- Obligation of the Central Bank to exchange sucres for US dollars at a fixed exchange rate of 25,000 sucres per dollar.
- Obligation of all firms to convert their accounting to dollars.

The law also used a conversion mechanism ("desagio") to translate previous sucre loans and deposits into dollars at lower interest rates.

On April 19, the IMF approved a 12-month standby credit of $304 million with a mandatory condition that Ecuador agreed to reschedule debt owed on Brady bonds and Eurobonds. This lending in arrears, according to Stanley Fischer, was in line with existing policy in which the Fund disemburses funds on the basis of an agreed program and when the country is engaged in good faith negotiations with the creditors.[49] The approval of the standby agreement released funds to Ecuador from other institutions as well. The World Bank approved a $425 million Structural Adjustment Loan (SAL), the IADB granted a $625 million credit and the Andean Development Corporation collaborated with $700 million.

The first procedural decision confronting the Ecuadorian government was whether it would convene a formal creditor committee. Ecuador decided against that, in order to avoid long negotiations. The diversity of bondholders, with different interests, would have made the committee fairly ineffective, and the restrictions on bond trading derived from private information for those participating in the committee also reduced the interest from the creditor side. However in late 1999, it convened a consultative group of eight representative institutional creditors. This group however was not given any hint as to the characteristics of the deal, but rather information about Ecuador's economic and financial position. This information was made available to all market participants through the Emerging Markets Traders Association in New York. Only two meetings were held, with mixed results. Institutions in general refused to discuss relevant aspects and preferred to do it in a private manner. Ecuador hired Salomon Smith Barney as manager for the future exchange. JP Morgan was later added as co-manager.[50]

The 27 of July, eleven months into the first Brady default Ecuador launched its offer to exchange each series of its Brady Bonds and Eurobonds for new uncollateralized Republic bonds maturing in 2030. In the case of the Discount and Pars the deal offered to pay overdue interest coupons. This interest payment was covered by the release of interest collateral that the bonds originally established. The 2030 bonds were issued with step up interest coupons, starting at 4% and rising 1% each year until reaching 10% in 2006 and after. Bondholders could elect to receive a new Republic bond with a fixed coupon of 12%, maturing in 2012. This option however required the creditor to accept a further 35% discount from the face value of the 2030 bonds it would otherwise have received. The aggregate amount of 2012 bonds was limited to 1.25 billion and holder of shorter dated Eurobonds and Brady bonds were given priority in the allocation of this bonds. There would be rationing if all preferred the 2012 bond. Details are provided in Table III.7.

[49] See Fischer (2000).
[50] See Buchheit (2000) for a complete description of how Ecuador restructured its debt.

Table III.7

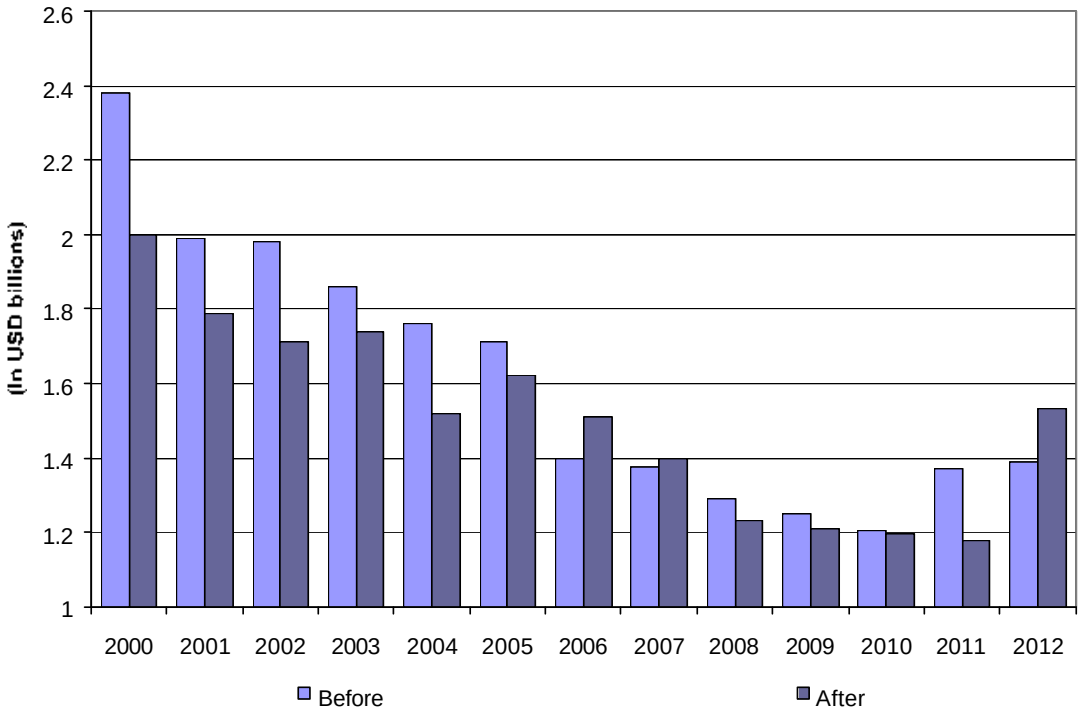
Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Due	Coupon		Date of default	Exchanged for:	Amount issued (in millions)	Curr.	Coupon		Exchange announ.	Exchange compl.	1st settle date	Interest accrual date	1st coupon	% exch.
				Rate	Period.					Rate	Period.						
Brady Pars (Collat.)	1,914	USD	Feb-25	step up (3 to 5)	S/A	Nov-28-99	2030 Eurobond					Jul-28-00	Aug-11-00	Aug-23-00	Aug-23-00	Feb-15-01	
Brady Disc. (Collat.)	1,435	USD	Feb-25	6MO LIBOR + 81.25 bps	S/A	Aug-28-99		2,500	USD	Step up (4 to 10)	S/A	✔	✔	✔	✔	✔	
Brady PDI (Uncoll.)	2,417	USD	Feb-15	6MO LIBOR + 81.25 bps	S/A	Feb-28-00	2030 Eurobond					✔	✔	✔	✔		97%
Brady IE (Uncollat.)	191	USD	Dec-04	6MO LIBOR + 81.25 bps	S/A	Dec-21-99						✔	✔	✔	✔	2012: May-15-01	
2002 Eurobond	350	USD	Apr-02	11.25	S/A	Oct-25-99						✔	✔	✔	✔	2030: Feb-15-01	
2004 Eurobond	150	USD	Apr-04	6MO LIBOR + 475 bps	S/A	Oct-27-99	or 2012 Eurobond	1,250	USD	12	S/A	✔	✔	✔	✔		

Source: Bloomberg.

The relative value of the different types of existing bonds was determined by calculating the PV of the payment streams on each bond (excluding the collateralized principal payment due at maturity on the two series of collateralized Brady bonds) at a consistent discount rate. The resulting relative values were reflected in differing exchange rates. The shortest dates instruments such as the Eurobonds were exchanged at par, while the longer dates Brady bonds received discounts of 42% (Discounts) and 60% (Pars). The holders of Pars and Discounts also received a cash payment equal to the present value of their collateral.

Ecuador had committed to the exchange only if 85% or more of the principal amount of the eligible debts chose to participate. By the time the offer expired on August 11, 97% of the eligible bonds had agreed to tender. The transaction resulted in a reduction in the debt stock of 40% and a cash/flow savings of approximately 1.5 billion over the first five years. Figure III.15 shows the reprofiling of the debt.

Figure III.15. Ecuador: Debt Service Profile before and after exchange



Source:

Oil warrants were discussed but not included into the new bonds since they would add new sovereign assets that could be attached in the case of an adverse court ruling, therefore giving bondholders the incentive to hold out on the exchange offer. Ecuador decided to continue servicing bonds that held out, thus incentivizing greater holdouts in future restructurings.[51]

The Ecuadorian exchange offered several new features.

(i) *Principal reinstatement.* Under the 2030 bonds a payment default occurring in the first 10 years that continues uncured for a period of 12 months automatically results in the issuance of additional 2030 bonds to the holders. (30% if the event occurs during the first four years after issuance, 20% during the next three years and 10% during the last three years). The goal of this was to avoid creditors being involved in repetitive debt negotiations were they would be relinquishing their rights in steps, weakening their bargaining position after each restructuring round.

(ii) *Mandatory debt management.* To reduce the strain involved in the refinancing of the bullets, the bonds contained mandatory debt management in which Ecuador committed to reducing the aggregate outstanding amount of each type of debt by a specified percentage in each year starting, in the case of the 2012 bonds after six years, and in the case of the 2030 bonds after 11 years. These

[51] See Buchheit (2000).

reductions could be implemented through cash buybacks, debt for equity or debt for privatization exchanges as well as by any other means. Failure to meet the reduction targets in any year triggers a mandatory partial redemption of the relevant bond, at par, in an amount equal to the shortfall.

(iii) *Exit consents.* Bradies being subject to New York law preclude amendments to the payment terms of the bonds (the amount and due date of payments) without unanimous consent of all bondholders. Most other provisions, however, could be amended by the action of a simple majority. As part of the exchange Ecuador solicited the consent of existing bondholders to amend the non/payment terms of those instruments. They removed the so-called exit covenant by which Ecuador had promised in 1995 never to seek a further restructuring of the Brady bonds, the negative pledge clause, the covenant to maintain the listing of the defaulted instruments on the Luxembourg Stock Exchange, and the cross default clause. By tendering the votes, participants were voting in favor of these amendments. The authorities maintained the property of retired bonds so that those who refused to participate would not be able to reverse the amendments.

On September 15, 2000 Ecuador renegotiated 800$ million with the Paris Club under Houston terms. They agreed that non-ODA credits would be repaid over 18 years with 3 years of grace at the appropriate market rate while ODA credits would be repaid over 20 years with 10 years of grace.

Box. Details of the Ecuadorian Exchange

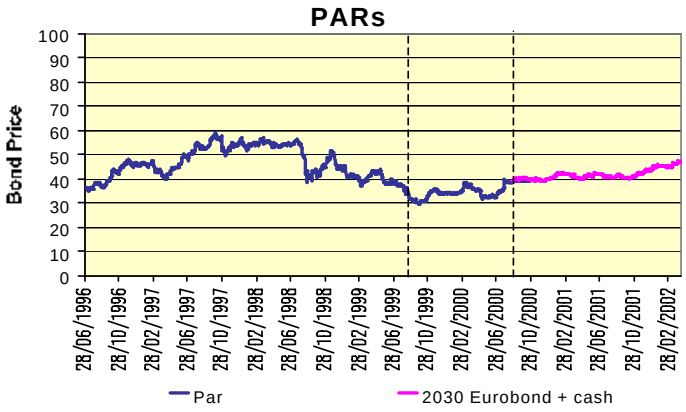
Ecuador exchanged four Bradies (two collateralized and two uncollateralized) and two Eurobonds for two new Eurobonds. The two collateralized Bradies (Pars and Discounts) were exchanged for a 2030 Eurobond after a debt write-off of 60% on Pars and 42% on Discounts. This write-off was in part compensated by a cash payment of US$760 million of principal collateral and of US$122 million of interest collateral.

Thus, for every US$100 nominal value of Pars, the bondholders received in cash US$23 + US$1.9. They also received US$40 nominal value of the 2030 Eurobond. For every US$100 nominal value of Discounts, the bondholders received in cash US$23 + US$5.9. They also received US$58 nominal value of the 2030 Eurobond. So the prices of the Par and Discount bonds were compared with these combinations of cash and 2030 Eurobond. Figure III.16 shows the evolution of the exchange from the perspective of the bondholder.

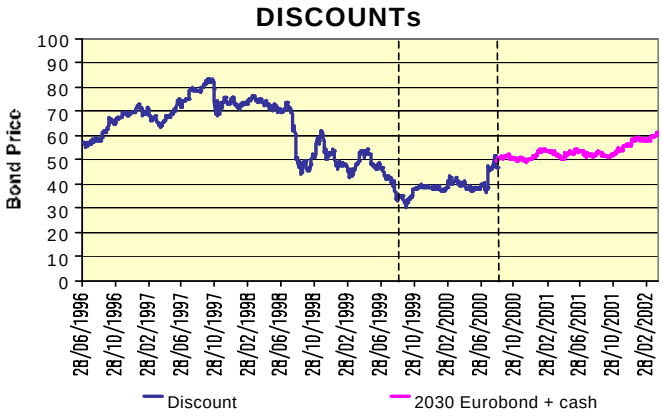
Holders of the uncollateralized Bradies (the PDIs and IEs) and the Eurobonds could choose between the 2030 Eurobond and a 2012 Eurobond. Holders of the PDIs were subject to an initial debt write-off of 22% while holders of the other three bonds had no initial debt write-off. However, choosing the shorter-term bond implied a(n) (additional) debt write-off of 35% for the four types of bondholders. In Figure III.16 the prices of the PDIs were compared with the prices of the 2030 Eurobond (after cutting them 22%), and with the prices of the 2012 Eurobond with a reduction of 50.7%. The prices of the two Eurobonds and the IEs were compared with the 2030 Eurobond prices and the 2012 Eurobond prices with a reduction of 35%.

A relative strong budget allowed for a substantial normalization of the macroeconomic environment, starting in 2000. As country risk declined, deposits in the financial sector recovered and the demand shock achieved through the exchange rate depreciation (current account surpluses peaked above 20% of GDP), allowed for a steady recovery of output. Ecuador grew 2.3% in 2000 and 5.4% in 2001.

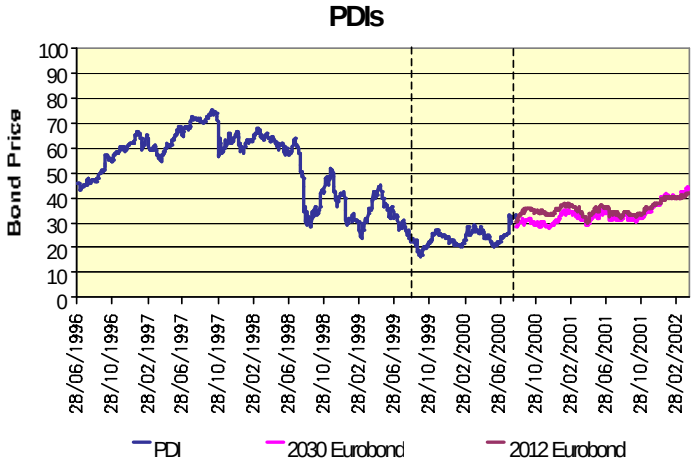
Figure III.16. Ecuador



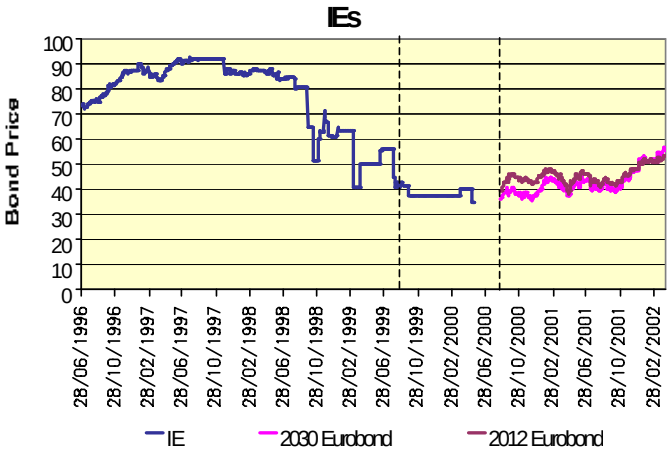
Source: Bloomberg and author's computations.



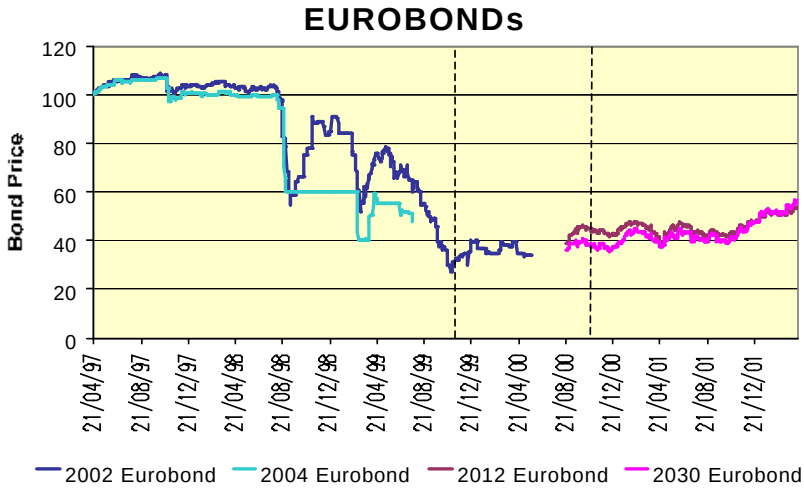
Source: Bloomberg and author's computations.



Source: Bloomberg and author's computations.



Source: Bloomberg and author's computations.



Source: Bloomberg and author's computations.

Table III.8

Defaulted Bonds	Original Amount Issued (in millions)	Curr.	Price 6 months before Default	Price Month before Default	Price day after Default	Price Week Before Announc.	Price Week After Announc.	Price at completion	Face Value Write-off	Exchanged Bond/Cash Mix Value at first settle date	Value 6 Months after completion	Value 6 Months after / Price 6 Months Before	Value 6 Months after / Price Month Before
											2012 / 2030		
Brady Pars (Collat.)	1,914	USD	38.8	32.86	35.5	35.6	39.3	38.6	-60	39.1	43.1	1.11	1.31
Brady Disc. (Collat.)	1,435	USD	45.7	42.63	34.1	37.6	46.2	47.4	-42	49.3	55.2	1.21	1.29
Brady PDI (Uncoll.)	2,417	USD	22.3	21.44	23.5	25.4	30.5	32.15	-49 / -22	28.2	36.1	1.62	1.68
Brady IE (Uncollat.)	191	USD	55.5	37.75	37.75	---	---	---	-35 / 0	30.5 / 36.2	40.2 / 46.3	0.72 / 0.83	1.06 / 1.23
2002 Eurobond	350	USD	73.8	39	27.89	---	---	---	-35 / 0	39.2 / 36.2	51.5 / 46.3	0.70 / 0.63	1.32 / 1.19
2004 Eurobond	150	USD	55.3	---	---	---	---	---	-35 / 0	39.2 / 36.2	51.5 / 46.3	0.93 / 0.84	---

Source: Bloomberg and author's computations.

Box. Chronology of Ecuador's Restructuring

1992:
January 20: Paris Club Agreement
1994:
Standby agreement with the IMF.
June 27: Paris Club agreement.
1995:
January 26- March 30: Border war with Peru.
February 28: Brady plan restructures $7.8 billion external commercial bank debt.
1996:
July 7: Abdala Bucaram elected president.
Ecuador fails to meet the targets of the IMF-monitored program.
December: Chase Manhattan gives $300 million bridging loan.
1997:
February 6: Ecuador's National Congress removes Abdala Bucaram from office.
From March: El Niño phenomenon at a 13% GDP cost.
1998:
August: Jamil Mahuad takes office as the new elected president (elected in July). Russian crisis. The insolvent Banco de Prestamos is closed.
October: Peace Treaty with Peru.
December: A blanket-deposit-guarantee is created by law and a Deposit Insurance Agency (AGD) is established to administer the guarantee and to manage the disposal of assets in closed banks. The AGD takes over Filanbanco.
1999:
March 11: Deposit freeze.
September 29: Letter of Intent to the Fund.
September 30: Deferral of payments on Brady bonds due next day. Ecuador is the first country to default on its Brady bonds.
October 28: Default on eurobonds and unilateral rescheduling of domestic dollar-denominated debt.
2000:
January 9: Dollarization.
January 21: Mahuad ousted in civilian-military coup.
April 19: IMF approves 12-month standby credit of $304 million.
July 27: Exchange offer for Brady and Eurobonds launched
August 11: Successful debt exchange: $6.5 billion in Brady and eurobonds were exchanged for a combination of 30- and 12-year bonds.
September 15: Paris Club agreement

e. Peru's Elliot Case[52]

Peru has had a long history of conflict with creditors. In particular, in 1985, President Alan Garcia adopted a confrontational attitude on external debt limiting debt service payments to 10 percent of exports in 1986. This policy was unilateral and included not only commercial banks but also official creditors, including the IMF and the World Bank. As a result the Peruvian debt prices steadily declined, falling from 45 cents per dollar in July 1985 to about 5 cents per dollar by early 1989.

The disaster of the Garcia administration led to the election of Fujimori, a relatively unknown underdog, identified as an outsider to the political establishment. When inaugurated in 1990 he announced a stabilization plan that included extremely tight (zero emission) monetary policy, prohibition to use Central Bank transfers to cover fiscal deficits, and removal of prices controls and subsidies. A privatization program was announced for 1991 and the foreign trade sector was liberalized as well. The tariff structure was lowered and simplified and the confusing multiple exchange rate system was streamlined. As a result inflation fell from 7650% in 1990 to 6% in 1999 and GDP rose at an average of 5% in the period 1991-1998. The consolidated fiscal deficit fell from 8.7% of GDP in 1990 to 0.5% in 1998.

Upon these positive developments, Peru started clearing its external debt position. First with the IDB in September 1991, and later with the World Bank and the IMF, in 1992. The arrears with these institutions were cleared in March 1993. This was accomplished through a Rights Accumulation Program with the IMF for the period 1991-93 approved on September 12, 1991.

Payments were rescheduled through three agreements with the Paris Club. These agreements took place in September 1991, May 1993 and July 1996. The agreement of 1991 was far-reaching in that it rescheduled arrears included in previously rescheduled debt. This meant that practically all of the entire stock of long-term inter-governmental debt and export credit was rescheduled. The amounts treated totaled $4461 million and the repayment profile received the Houston terms treatment. A unique feature in the 1991 agreement was that all of the moratorium interest due in the consolidation period was deferred. 30% was scheduled to be paid between November 1992 and May 1994 and 70% between May 1995 and November 1997. Another unusual feature was that the repayment of arrears on long-term debt contracted after the cut-off date (January 1, 1983) was scheduled to be paid in equal semi-annual installments between June 30, 1993 and December 31, 1998. The deferment was made contingent on Peru's performance under the IMF's Rights Accumulation Agreement. The Paris Club agreement in May 1993 again accorded Houston Terms. The amounts treated were $1884 million with an unusually long consolidation period of 39 months. The repayment terms were standard.[53] The July 1996

[52] This material was in part reconstructed with information from the IMF and Peru's Finance Ministry.

[53] ODA debt was to be repaid over 20 years with 10.5 years grace and non-ODA debt over 15 years with 8.5 years grace. Interest obligations were reduced by 50% for 1993-1994 with the postponed amounts repayable between September 1996 and March 2001.

agreement rescheduled loans contracted before 1983, including some of the debt previously rescheduled in 1991 and 1993. Amounts treated totaled $6723 million but payments due after 1999 were tailored to avoid a hump in Peru's debt service. An innovative feature of the agreement was that principal payments could be accelerated if real GDP growth exceeded the forecast. Implementation of the agreement was conditioned on compliance with IMF program approved on July 1, 1996

Brady Plan

In October 1995 Peru announced a plan to restructure its commercial debt in accordance with the Brady Plan through an agreement between Peru and the Commercial Bank Advisory Group. The term sheet for Peru's Brady restructuring was issued on June 5, 1996. The debt restructuring was aided by the rescheduling by the Paris Club of payments coming due between 1996 and 1999, as well as by loans approved by the IDB in November 1996 and by the World Bank in February 1997. In the same month the IMF augmented Peru's Extended Fund Facility (EFF) -approved on July 1, 1996- by $223 million. In March 1997 $10.5 billion of commercial debt was restructured in the Brady Plan. Debt was reduced by $3.6 billion. The debt reduction package offered Peru's eligible commercial bank creditors and private suppliers a debt reduction menu with four "Brady" bonds, a debt-buy-back option, and substantial past due interest forgiveness. The menu included:

- Par bonds at below market interest rates.
- Discount bonds with face value 45% below that of the eligible debt.
- Front/Loaded Interest Reduction bonds (FLIRBs) at below market interest rates.
- A Past Due Interest (PDI) bond at below market interest rates.

Most of the 287 commercial banks involved opted for FLIRBs, bonds that are not backed by zero coupons.

Vulture funds: Elliott vs. Peru

The Brady deal restructured, among many others, the loans corresponding to Banco de la Nacion and Banco Popular. Approximately four months later, Elliot Associates LP, a well-known vulture fund purchased about 20.7$ million face value of the bank's loans for about 11.4$ million. Elliot decided to hold out from the Brady deal and file suit in New York against the banks and Peru, demanding full payment on the bank loans. In October 1996 Elliott commenced a lawsuit in New York State Court. Judge Robert Sweet of the Southern District of New York found that Elliott had bought the debt with the purpose of bringing suit and dismissed Elliott's claims invoking the "Champerty" Statute, which prohibits the purchase of a note or bond with the purpose and intent of bringing a lawsuit on the instrument.

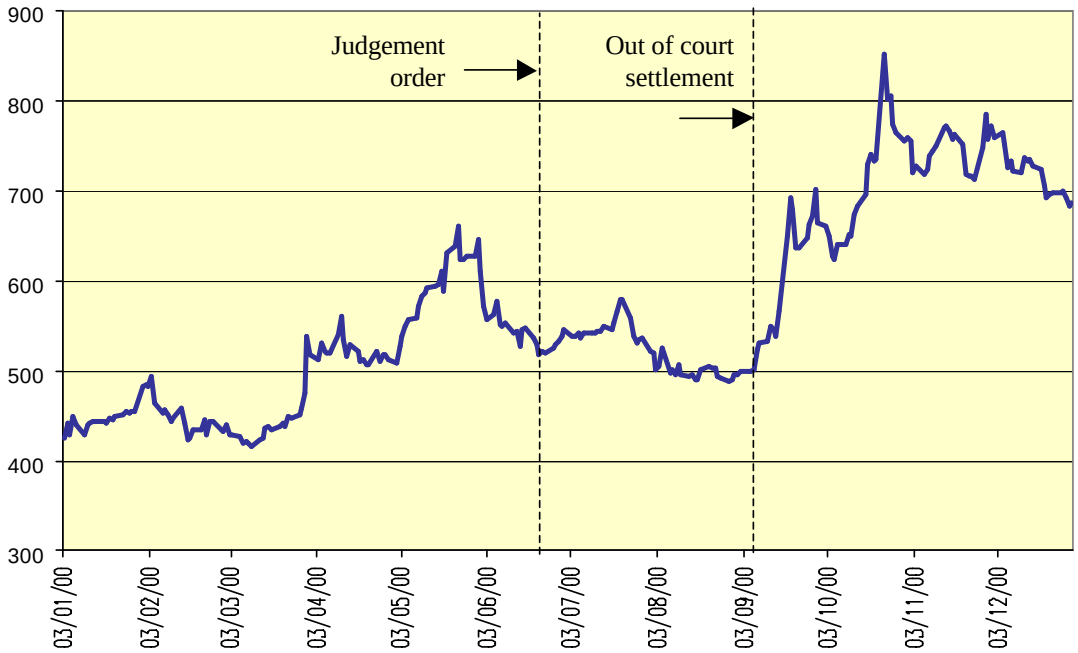
On October 20, 1999 the U.S. court of appeals for the second circuit reversed the previous court ruling in the case Elliott vs. Peru. Having obtained a judgment in US courts, Elliott took steps to have the judgment enforced. On June 22nd 2000 Elliot was awarded a judgment order against Peru and could start seeking to attach assets.

The investment firm obtained restraining orders against banks in the US, Canada, England, Germany and the Netherlands. Initially Elliot placed a restraining order against Chase Manhattan Bank in New York, Peru's New York fiscal agent for the Brady bonds, after successfully arguing that the funds were still the property of Peru. The word was out and Peru skipped an $80 million interest payment due September 7, 2000 on four of its Brady bonds to try to outmaneuver the fund. Elliot then sought, but did not get, that a Brussels Commercial court impose a restraining order on Euroclear to stop the payment of coupons on Peru's Brady bonds. Elliot appealed the decision to the Court of Appeals of Brussels that issued a restraining order the next day. As the thirty-day grace period was coming to an end, Peru gave in and paid $58 million (this figure includes the full judgment value plus post-judgment interest) to Elliott to avoid defaulting on its Brady bonds.

As can be seen from Figure III.17 the onset of the Elliot crisis implied a substantial increase in spreads after the settlement. While this partial evidence could provide some suggestion markets viewed this action as potentially threatening to future lending we argue below that the impact of Elliot has been overstated.

Gulati and Klee (2001) argue that the Elliot case should quickly be reverted to avoid a disruption of sovereign lending and a sharp increase in the value of holding out. According to Gulati and Klee (2001) the Court of Appeals granted the restraining order on the basis of the pari-passu clause by which no creditor can be exempted from a payment, with all payments having to go in a pro-rata fashion to all bondholders. This, the authors claim, does not correspond to the market understanding of the pari-passu clause and precludes, for example, the repayment to multilateral institutions in advance of private creditors. According to their view the pari-passu applies to seniority in a bankruptcy situation and not to the payments under normal circumstances. In addition other clauses stipulate the pro-rata payment: (i) mandatory prepayment clauses, that restricts not ratable prepayments to others, (ii) turnover clauses, that say that creditors who receive preferential prepayments have to turn it over to others, (iii) the sharing clause that says that whatever one creditor gets should be shared with others, (iv) the negative pledge clause that says that other lender are not to be given a preference by having assets pledged to them and (v) and the acceleration clause where a creditor who holds debt in default gets to ask for all the debt to be paid immediately. Under the Elliot ruling all these clauses would be rendered superfluous, which is nonsense.

Figure III.17. Embi Spread



Source: Bloomberg.

Return to capital markets

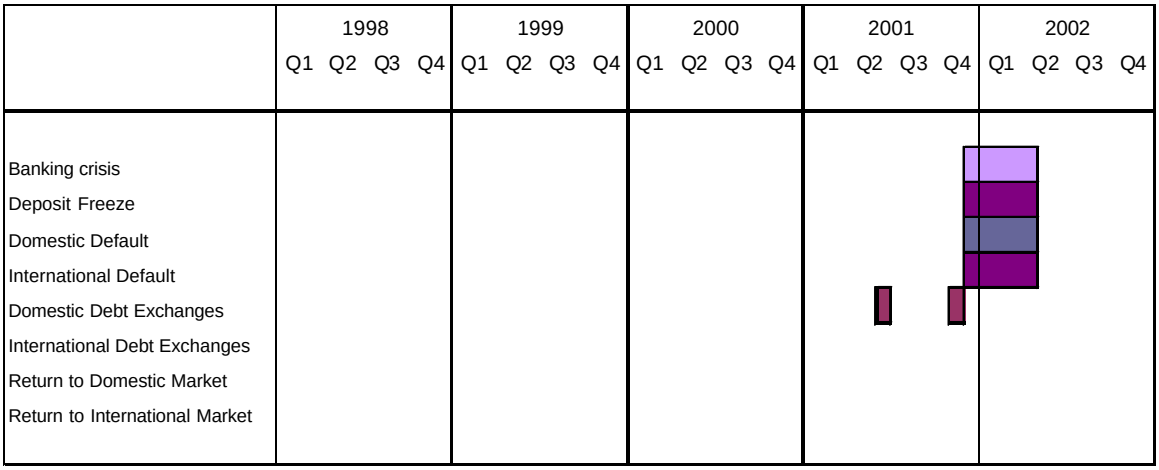
On February 6, 2002 Peru returned to international capital markets issuing $500 million in 10-year global bonds. This was Peru's first such issuance in 74 years. The bonds were placed at 455 basis points over comparable US Treasuries. On the next day, February 7, 2002, Peru initiated a swap of about $1.2 billion of its $3.7 billion outstanding Brady bonds in exchange for $930 million in global bonds.

Box. Chronology of Peru's case

1991:
September: Peru clears arrears with IDB.
September 12: Rights Accumulation Program with the IMF for the period 1991-93.
September 17: The Paris Club reschedules 6 billion of Peru's official bilateral debt.
1993:
March: Peru clears arrears with the IMF and the World Bank.
May 4: The Paris Club reschedules payments for the March 1993 – March 1996 period lowering them from 1.1 billions to about 400 million.
1995:
October: Peru announces its Brady Plan.
1996:
June 5: Term sheet for Peru's Brady restructuring is issued.
July 1: IMF approves $358 million Extended Fund Facility (EFF).
July 20: The Paris Club reschedules 1 billion in payments coming due between 1996 and 1999.
October 18: Elliot, a small U.S. investment fund commences lawsuit. Elliott had acquired approximately $20.6 million in debt for $11.4 million. Elliott lost the lawsuit in first instance.
November 13: IDB approves $235.5 million loan to assist Peru in its debt-restructuring program.
1997:
February 11: World Bank announces a $183 million loan to support Peru's agreement to restructure commercial debt.
February 13: IMF announces a $223 million disbursement in an augmentation of the amount of Peru's Extended Fund Facility (EFF) approved on July 1, 1996.
March 7: Brady Plan commercial debt restructuring takes place: $10.5 billion are restructured.
1999:
June 24: IMF approves $512 million credit under the Extended Fund Facility (EFF).
October 20: U.S. Court of Appeals for the Second Circuit overturns the lower court's ruling in the case Elliot vs. Peru.
2000:
June 22: Elliot is awarded a judgment order against Peru and can start seeking to attach assets.
September 7: Peru skipped an $80 million interest payment due on four of its Brady bonds to try to outmaneuver the fund.
October: As the thirty-day grace period was coming to an end, Peru gave in and paid $58 million to Elliott to avoid defaulting on its Brady bonds.
November 22: Congress removes president Fujimori.
2002:
February 6: Peru returns to the capital markets issuing of $500 million in 10-year global bonds. It is Peru's first such issuance in 74 years.
February 7: Peru initiates a swap of about $1.2 billion of its $3.7 billion in outstanding Brady bonds in exchange for $930 million in global bonds.

f. Argentina[54]

Figure III.18



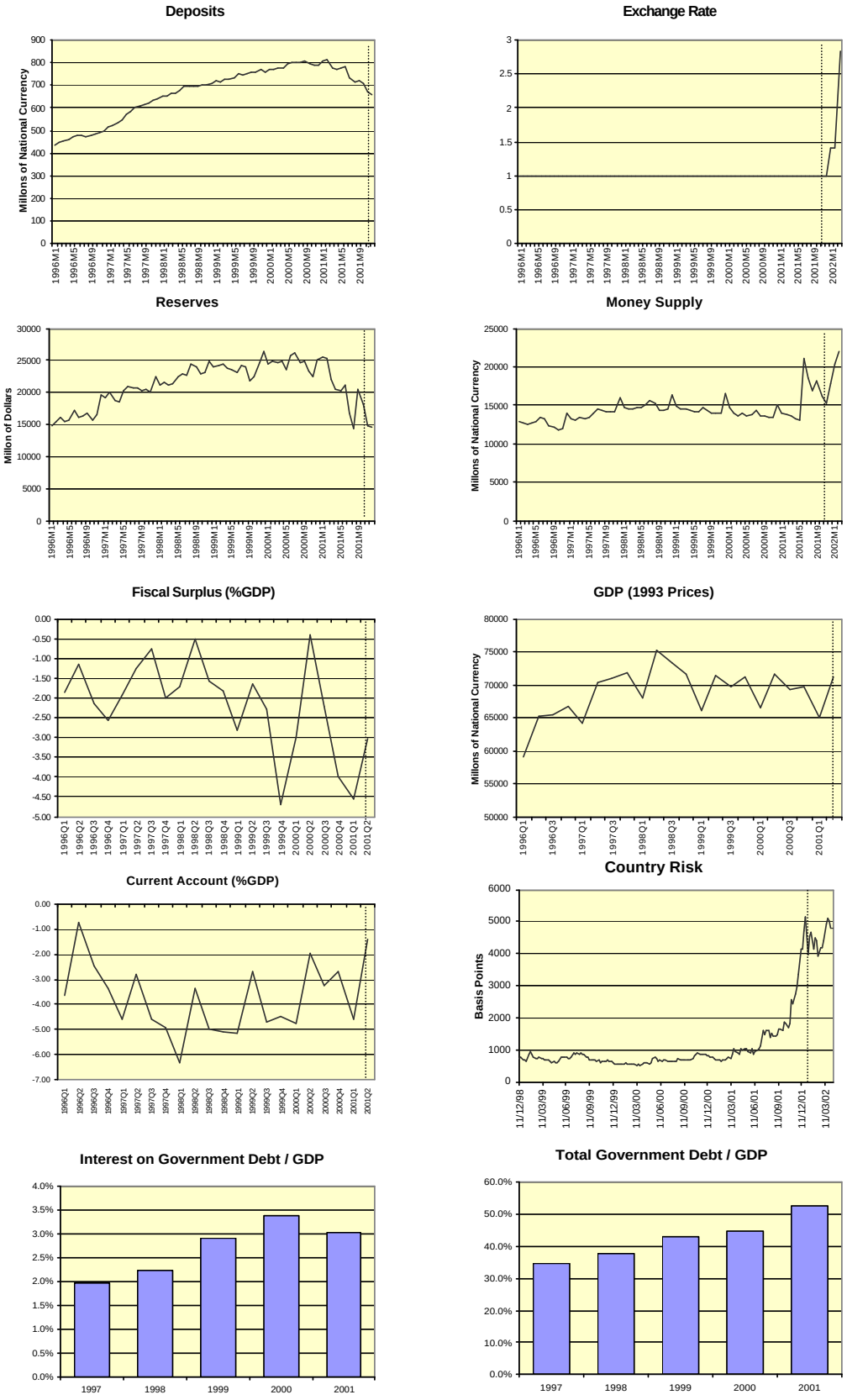
After 45 years of high inflation, Argentina launched, in 1991, an exchange rate based stabilization program known as "The Convertibility Plan" that tied the Argentine peso to the US dollar and forced the Central Bank to back at least two-thirds of its monetary base with foreign exchange reserves. While Convertibility was the signpost of all reforms, the success of Argentina's transformation during the last decade was the result of the simultaneous implementation of significant structural reforms (deregulation, trade liberalization and massive privatization), as well as the reopening of its access to capital markets through the signing of the Brady deal in April 1992.

In the ensuing years, Argentina grew significantly, while privatization revenues allowed for a relatively sound fiscal policy. However, starting in the second half of 1994, after a brief period of fiscal surpluses, budget deficits reemerged, mainly financed through the issue of debt. Capital inflows were briefly interrupted by the Tequila crisis, but the successful transition through that crisis, with an effective fiscal tightening and Convertibility preserved, strengthened the view that Argentina was on a sound reform path. During these years, a substantial amount of debt was also issued to cancel previous unregistered liabilities.[55] As a result of these so-called skeletons, debt ratios increased quickly in spite of a relatively sound fiscal policy.

In 1995 President Menem was reelected for a second term. However, during his second presidency government spending, particularly in the provinces, remained unchecked. Debt issues by subnational jurisdictions added to overall debt problem.

[54] For alternative views on the Argentine crisis see Perry and Serven (2002), Hausman and Velasco (2002), Powell (2002) and Calvo, Izquierdo and Talvi (2002).
[55] In some cases, such as with the sale of YPF, these liabilities were cancelled with privatization proceeds.

Figure III.19. Argentina's Macro Trends



Source: IMF and Bloomberg.

The Asian crisis of 1997 left Argentina unscathed, but the Russian default implied an increase in sovereign spreads and financing costs. In January 1999, the devaluation of the Real put substantial pressure on Argentina's exchange rate regime. Most analysts predicted that Argentina was caught in an unsustainable policy mix if betting on fixing its exchange rate vis a vis the dollar but pursuing trade integration with Brazil through the trade agreement known as Mercosur. This pessimism, shared by the local business community, implied a slowdown in investment and the worsening of a recession that had started at the outset of the Russian crisis. The recession deteriorated fiscal accounts by reducing fiscal resources and the deficit increased considerably during the period 1998 and 1999, for both national and provincial governments. In addition, both Brady debt and debt placed under concessional terms to cancel previous skeletons was being replaced by market debt commanding much higher interest rates. All these factors combined to increase the primary surpluses that the government needed to maintain debt ratios in check. The successive fiscal packages barely managed to keep up with the interest increases, rendering no real improvement in the overall deficit situation.

In late 1999, Fernando De La Rua, a moderate centrist from the Radical Party, was elected after 10 years of Peronist administration. De La Rua strongly focused on fiscal responsibility as his main priority. However, his Finance Minister, Jose Luis Machinea, President of the Central Bank during the hyperinflation of 1989, failed to create the confidence needed to turn around the economy. By mid year, expectations turned extremely negative and analysts started arguing that Argentina, given its stagnant growth rate, was embarked on an unsustainable debt path. These worries increased dramatically after the resignation of the Vice President over the resolution of an alleged bribe scandal in the Senate. The resignation substantially weakened the government, which was comprised of an alliance of political parties one of which was represented by the Vice President.

In spite of a significant tax increase and substantial expenditure cuts including public sector wage reductions, fiscal deficits increased to 6.5 billion (slightly over 2% of GDP) in 2000. The resilience of the fiscal imbalance triggered a run on the bond market, with country spreads skyrocketing to close to 1000 points before the Finance Ministry was able to put together a program with the aim of covering Argentina's financing needs for the period 2001-2002. The program, known as "blindaje", was announced the 18th of December and released a substantial line of credit from multilaterals totaling close to 20 billion.[56] The package also relaxed the limits imposed by the Fiscal responsibility law, a law approved in 1999 that imposed quantitative targets for the budget and that was supposed to constraint government deficits, rendering the fiscal picture more stable. Supposedly the Fund had stimulated the Argentine authorities to implement a fiscal push to jump-start the economy. The package brought strong relief in the short run. Country risk collapsed to 700 points in just a few days. However, in a couple of months pessimism returned and country risk started increasing again.

The "blindaje" included a proviso that was introduced to make the program incentive compatible and insure compliance by the local authorities. It did not provide full covering

[56] 13.7 billion form the IMF, 1 billion from Spain 2.5 billion from BID and 2.5 from the World Bank. The package included PSI, through participation of local financial institutions, even though in a non binding way.

of Argentina's financial needs in either year, but, on the contrary, forced the government to tap financial markets. In 2001 the government faced important rollover needs in April and May. By early March the market started suggesting that such financing would not be forthcoming unless radical restructuring and fiscal consolidation could be implemented. Once the fiscal numbers for the first quarter showed that the IMF targets had been blown by 1 billion dollars, with a deficit of 3.1 billion in the first quarter alone, the Minister realized that he had no chance of securing the financing and resigned. Ricardo Lopez Murphy a respected orthodox economist was appointed to the post.

The new Finance Minister attempted an expenditure cut of about 2 billion dollars (close to 2% of consolidated government expenditure). While this was a quantitatively modest, it would have been sufficient the put the IMF program back on track. However the expenditure cuts met fierce political opposition. The Minister lost the support of the President and decided to resign. He was replaced by Domingo Cavallo, responsible for Convertibility and for the economic miracle of the early 90s. Increasing political uncertainty had triggered an incipient deposit run, the beginning of a trend that would prove lethal later on.

Cavallo argued that Argentina's problem was not the magnitude of the fiscal disequilibrium but the lack of growth. To stimulate growth he slashed taxes in some labor-intensive sectors, replacing the proceeds with a widespread tax on financial transactions. In spite of the heterodox rhetoric, the new resources allowed for the fiscal deficit to fall to 1.8 billion in QII, almost half the QI number. He also proposed a change to Convertibility by linking the peso to an average of the euro and the dollar, to be effective, to avoid a devaluation, when the euro reached parity with the dollar, the move aimed at delivering a more stable trade weighted real exchange rate. Unfortunately, discrepancies between the Finance Minister and the President of the Central Bank led to the resignation of the latter. The combination of these two events shattered the confidence on Argentina's exchange rate system, increasing interest rates significantly and aborting an incipient recovery process that had taken place in the initial weeks of Cavallo's tenure.

The financing needs of April and May were covered with the issue of a Bond sold to local financial institutions, which were allowed to integrate liquidity requirements with the new instruments. This led to a one to one decrease in Argentina's international reserves and therefore to a weakening of the convertibility ratios. Markets remained closed for Argentina, forcing a cancellation of a short term T-bill auction scheduled for April 24. Many analysts in Wall Street were arguing that Argentina would default and some even argued that Argentina should default. Academics related to the new Washington administration proposed different schemes for Argentina's default.

As a result of the tightness of the liquidity constraint the government undertook an exchange offer to lengthen the maturity of its debt and to reduce its financing needs in the short run. The exchange was expected to be larger than any previous attempt and included a number of special characteristics. First, it would cover a very large range of bonds, including short, medium and long term, and a total nominal value of debt of 65 billion. The exchange was structured in "buckets" by which short-term debt could only be transformed

into relatively short instruments, though obviously longer than the original; medium term instruments could be exchanged for similar medium range instruments; and long instruments changed by longer instruments with substantial short run capitalization of interests. Given the high yields on Argentine bonds at the time, it looked reasonable to limit maturity extension as much as possible. The coupon structure was changed to provide substantial debt relief in the initial years.

All transactions were of a strictly voluntary nature, and were to be implemented through a syndicate of banks with JP Morgan and CSFB as lead managers and Deutsche Bank, Salomon Smith Barney and a set of local institutions as co-managers. The exchange commission was set at 0.55% of nominal value. Local pension funds were expected to tender most of their holdings. However it was chosen that they do so through the exchange (thus paying the commission) to avoid the risk of the exchange being declared as technical default or involuntary by rating agencies.[57] The offers could be placed either in a competitive or noncompetitive segment. Non-competitive offers accepted any cutoff price (over a threshold announced in advance). Competitive offers risked being left out of the exchange.

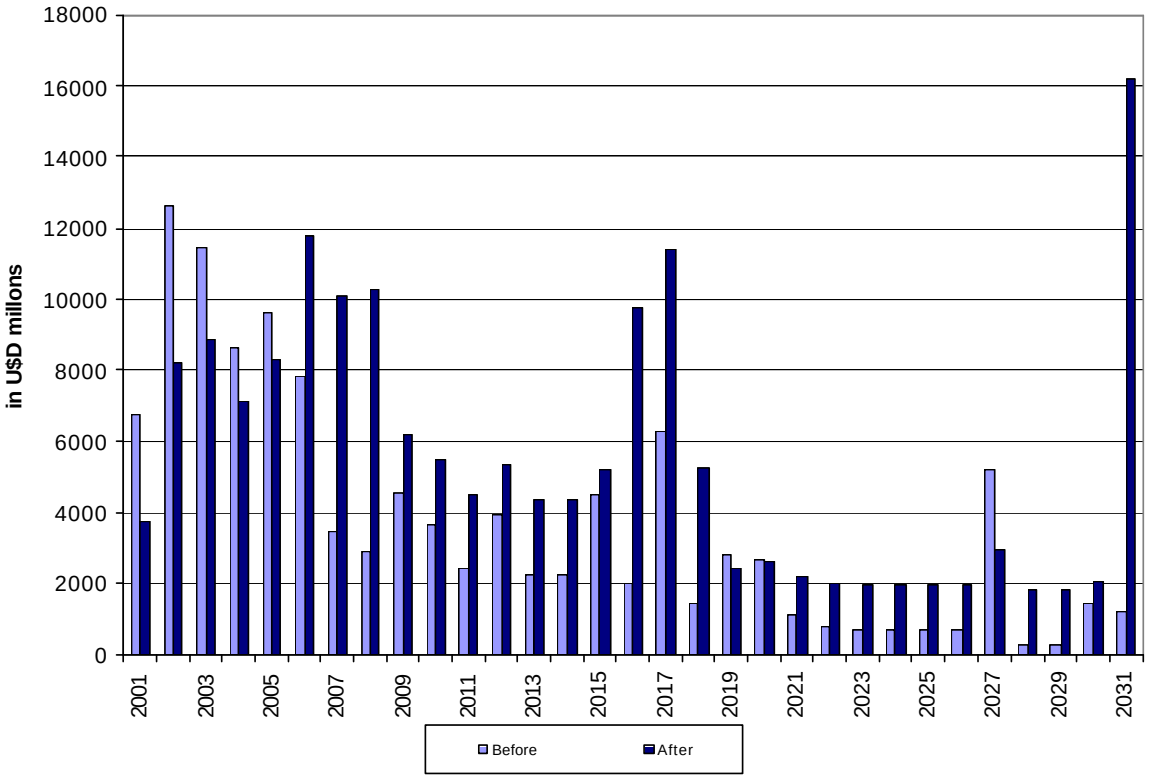
The operation allowed to exchange short term local debt for another local bond (under jurisdiction of Argentine law) with maturity in 2006, six semester amortization bullets, interest capitalization in the first two years and an interest rates linked to local rates after two years. Other New York denominated bonds were exchanged for three global bonds (also under New York law) maturing in 2008, 2018 and 2031. The 2008 global had a six semester bullet amortizations, and interest rate of 7% during the first three years and of 15.50% for the remaining years. The 2018 had 5 years of interest capitalization with a 12.25% interest rate after the first year. It amortized in 5 semester bullets. The 2031 also capitalized interest for 5 years, with an interest coupon of 12% in ensuing years. It amortized in one bullet after 30 years. The offers had to be posted on the web. Participants in the market segment announced the price they had to receive for their bonds in exchange for the new bond to be issued. The government chose its cutoff price in order to balance participation, short-term debt relief and minimize cost.

In the end, the exchange was a success. Liquidity was the main reason for participation. Over a total eligible debt of 65 billion offers were received for 32.8 billion. In the end 29 billion of debt was exchanged, providing a reduction in debt obligations of close to 16 billion in the initial five years. The cost of the exchange was 35 basis points, which arises from comparing the yield obtained in the retirement of the debt and the cost of new issues. In many cases, however, this entailed the transformation of low coupon debt (bought at a substantial discount) relative to nominal value, with high coupon debt (issued at par). Maturities were extended at a high cost of about 16%, and substantial capitalization of interest implied an increase in total nominal stock of debt. Figure III.20 shows the reprofiling of the debt following the exchange.

[57] The bonds exchanged by the Central Bank did not pay the fee, and those presented by three government owned institutions, paid a lower commission.

While the government insisted that the debt exchange was not the priority of its economic program, and that sustained recovery could only come from a sustainable recovery in fiscal numbers, the debt exchange allowed for a short lived reduction in spreads. However the negative mood and the lack of reactivation quickly led to a new wave of skepticism.

Figure III.20. Argentina: Debt Service Profile before and after June's exchange



Source: Mecon.

In July, several provinces also started showing significant refinancing difficulties. The provinces had relied on bond issues but also on bank loans to finance their increasing deficits. The mounting fragility of the fiscal situation implied that banks were increasingly reluctant to roll over this financing, in spite of the fact that provincial debt had a tax guarantee (taxes collected by the Federal Government but owned by the provinces were first assigned to a fiduciary which honored debt payments prior to transferring the remainder of the resources to the provinces). By early July many provinces had run up so much debt that the residual resources they were obtaining to run their governments were dangerously approaching zero. This uncertainty triggered a new run on the bond markets. Spreads that had fallen to less than 800 points after the debt exchange increased to 1000 two weeks later. Faced with this run, Cavallo launched the idea of running a zero fiscal deficit. To this purpose a change in the financial administration law was enacted by which the Secretary of the Treasury was obliged to cut wages and pensions if resources were not available to balance the budget. The initial cut was 13% to be applied to all of QIII, and which ensured a zero deficit on an accrual basis. (A deficit of 700 million remained on a cash basis).

The zero deficit law initially passed as a Decree of Necessity and Urgency and later ratified in a pact with governors and approved by Congress met substantial skepticism by market participants. In spite of implementing a clean cut of expenditures of about 4 billion per year, it induced a massive sell off of Argentine debt with spreads increasing about 400 bps points immediately after the announcement. It is relatively unclear as to why the markets reacted so negatively to a fiscal adjustment they had demanded for so long. Some analysts suggested that given the prevalence of short financial positions in Wall Street, there was a speculative wave of selling to signal to the market that the move had been negative. This however cannot be verified. Others argue that the recognition by the government that no additional credit was available (the main justification for the new rule), as the reason for the increased hysteria regarding Argentine debt contributing to the sell-off.

While the implementation of the zero fiscal deficit law provided some relief, country risk remained high. The recognition of the government that the zero fiscal deficit law had been implemented because credit was not further available led to fears regarding the solvency of the financial sector and therefore to a substantial outflow of deposits and loss of reserves. As money poured out of the financial sector and out of Argentina, the economic implosion accelerated.

The government looked for the support of the IMF, which was reluctantly granted, in recognition of the substantial fiscal effort the administration had managed throughout the year. A 4 billion credit line to prop up the reserves of the Central Bank was made immediately available. About one billion was transferred to the government. PSI was forced through the triggering of a contingent repo-line with private banks for close to 2 billion dollars.

At this point the US Treasury launched the idea that Argentina's debt was unsustainable and that the government should work on a refinancing deal. Initially the proposal was to use IMF money to guarantee new debt issues at a lower cost. However, the money allocated by the Fund for this purpose (3 billion had been earmarked) was relatively minimal, and no other sources were readily available. These statements, while falling short of a declaration on the need to default (that many feared from the US Treasury), added considerable noise and significantly restricted the political feasibility for the Argentine government to push for additional fiscal austerity.

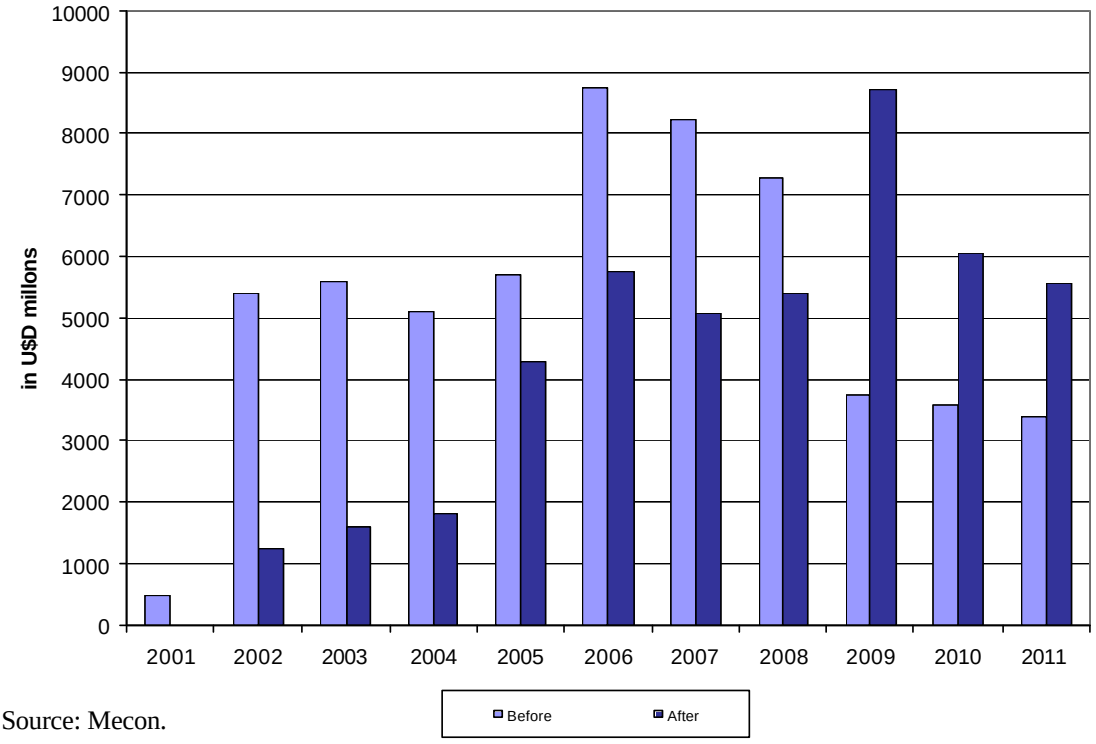
In September tax collection fell substantially, once again forcing new additional measures on the fiscal front. At this point Cavallo announced that he would seek debt relief in a voluntary fashion and in two stages, initially with local bondholders and in a second stage with foreigners. The announcement created substantial uncertainty with bond prices plummeting dramatically in the days following the announcement.

The idea was to offer a debt exchange by which local bondholders would be able to swap their bonds for a better instrument, a guaranteed loan, governed by Argentine law. The guarantee of the loan were the resources collected by the financial transaction tax and the bondholders kept the option of recovering the original bonds if any of terms and conditions of the guaranteed loans were changed in the future. In exchange for the granting of the

guarantee, interest payments were reduced 30%, with a cap of 7.0%. Maturities were also extended on shorter term instruments and interest payments made monthly, in order to match the interest payments with the collection of the financial transaction tax. The idea of the exchange was to segment local and external bondholders, protecting the local financial institutions and local pension funds by guaranteeing the resources to honor the obligations with them.

The bond exchange was extremely successful with almost all debt in the hands of banks, local pension funds and local residents being tendered. In all 41 billion of debt instruments were offered, all of it accepted, implying a reduction of 2.35 and 2.5 billions in interest payments and amortizations in 2002 alone. Financing needs were reduced by US$26.2 billion in the first five years.

Figure III.21. Argentina: Debt Service Profile before and after November's exchange



Source: Mecon.

The incentives, for participation were of an accounting nature for banks and pension funds (the new instrument could be valued a par rather than at marked to market), but the true reason was the threat of an involuntary restructuring in worst terms if not accepted. In fact this was hinted in the contract, by saying that any improvement in the renegotiation of remaining obligations would carry on to the owners of the guaranteed loan.[58] The obligation was considered a technical default by rating agencies and S&P moved Argentina to the selective default (SD) category.

[58] The guarantee carried little value as always government debt is guaranteed by tax collection.

This unequal treatment of local and foreign creditors did not find positive echo among multilateral institutions. In spite of the improvement in the government's cash flow, Argentina failed to meet the fiscal targets convened with the IMF when it seeked the augmentation in August, leading to a withdrawal of Fund support. The withdrawal of the Fund, was possibly motivated by the fact that they could not support a program that would benefit local bondholders at the expense of foreign bondholders that added to the fatigue associated to Argentina's repeated underperformance of fiscal targets. The news of the lack of support was the straw that broke the camel's back. The continued outflow of deposits from the financial sector accelerated dramatically forcing the government to implement an exchange rate holiday and deposit freeze in order to avoid the collapse of the two largest public banks (Banco de La Nacion and Banco Provincia). The deposit freeze led to a popular uprising that ended with the resignation of Cavallo and one day later of the President.

The new interim President, Rodriguez Saa, decided to default outright on all debt (payments to the multilaterals however remained current). In a brief communiqué on December 24 Argentina announced that it was suspending all payments on all debt instruments. This default was unique in that all claims were declared in default, even before legally being in default. The default was also unique in that it was celebrated in Congress as a victory. These reactions puzzled the investor and the multilateral community aware that about 60% of debt was held by Argentines themselves (a larger fraction than in our previous case studies).

However, the status of some debt instruments remained uncertain. Multilateral lending remained current and guaranteed loans, which capitalized interest through April, were left in a gray area pending definition.

Ten days into his tenure, Rodriguez Saa lost the support of his own party and was forced to resign. The new President, Eduardo Duhalde, decided immediately on a devaluation of the peso, and forced the pesification of the financial sector. Pesification was decided in an asymmetric fashion, with deposits pesified at a higher rate than bank loans. This required a bailout of the financial sector to compensate for the higher value of liabilities. Bank restrictions remained in place, with all CD's above a small threshold restructured into long 10-year (inflation indexed) peso or dollar denominated bonds.

Guaranteed loans were also pesified and indexed by inflation. The pesification of guaranteed loans led to judicial claims against the Argentine government. In January the Supreme Court had ruled in the *Smith vs. Poder Ejecutivo* case that economic emergency allowed for a transitory suspension of property rights but not to the arbitrary or permanent denial of such rights. Thus the Supreme Court started de-freezing financial assets prompting a sharp increase in monetary holdings and a run on the dollar. The exchange rate jumped briefly to four (after being one to one in December) before going back to slightly below three. The *Smith vs Poder Ejecutivo* case was used by pesified guaranteed loan holders to argue against forced pesification of the loan. As of writing the courts had not yet expressed their opinion on this issue. Banks, however, decided not to sue, expecting to

negotiate directly a compensation from the government for their losses. Pension funds were hinting litigation in order to negotiate a settlement with the government.

As of writing, renegotiation of defaulted instruments on New York law was yet to start. Some relatively minor lawsuits had been presented, but so far the creditors were expecting a move from the Argentine government, an agreement with the IMF, and a clarification of the economic and political scenario.

Box. Chronology of Argentina's Restructuring

1999:
January: Brazil's Real devaluation.
October 24: Fernando De La Rua, a moderate centrist from the Radical Party, elected President after 10 years of Peronist administration.
Fiscal responsibility law passed.
2000:
December: Country spreads skyrocket to close to 1000 points.
December 18: The "blindaje" is announced and a substantial line of credit from multilaterals totaling close to 20 billion is released. Country risk collapses to 700 points in just a few days.
2001:
March 2: Machinea, the Finance Minister, resigns. Ricardo Lopez Murphy is appointed to the post.
March 19: Lopez Murphy, after announcing a tight fiscal program lacking the support of the President, resigns. Domingo Cavallo replaces him.
April and May: Important financing needs are covered with the issue of a bond sold to local financial institutions. Weakening of the convertibility ratios.
April 24: A short term T-bill auction scheduled for that day is cancelled.
June: Successful debt exchange for 27 billion.
July: Several provinces start showing significant refinancing difficulties. Uncertainty triggers a new run on the bond markets. Spreads that had fallen to less than 800 points after the debt exchange increase to 1000 two weeks later.
July 30: Zero deficit law passed. Cutting spending by 1.5% of GDP. Sell off of Argentine debt with spreads increasing about 400 bps points immediately after the announcement.
August 22: 8 billion IMF support program.
October: Cavallo announces that he will seek debt relief in a voluntary fashion. Bond prices plummet.
November 23: Domestic bond exchange commences. It is considered a technical default by rating agencies and S&P moves Argentina to the selective default (SD) category.
November 30: Bank run.
December 1: Cavallo announces a deposit freeze and an exchange rate holiday.
December 5: Withdrawal of IMF support.
December 19: Cavallo resigns.
December 20: De La Rua resigns.
December 23: The Legislative Assembly names Rodriguez Saa, a peronist, as the new interim President.
December 24: Argentina announces the suspension of all payments on all debt instruments. The default is celebrated in Congress as a victory.
2002:
January 2: Rodriguez Saa loses the support of his own party and is forced to resign. The new President, Eduardo Duhalde, decides immediately on a devaluation of the peso, and forces the pesification of the financial sector.

IV. Conclusions: Lessons from Recent Defaults

The default episodes of the 90s represent a substantial departure from historical experience. Historically bond defaults entailed long and protracted negotiations with many disseminated creditors, the solution for which was measured in decades. In the 80s, syndicated bank loan restructuring also took close to a decade until the strong determination of the US government provided the incentives to work out a solution to the problem. Thus recent defaults have been faced with panic, fear and anticipation of a collapse of the new international financial system.

However the reality of the defaults in the last couple of years has been different. First, they have not led to massive collapses of the international financial system. In contrast to the 80s, only one or two countries at a time experienced payment difficulties, and this did not imply that the rest of the countries would necessarily follow the same fate. Thus while there has been substantial academic interest in the issue of contagion it is clear that during the 90s default experiences did not lead to a massive collapses, i.e. there has been evidently, less contagion than in the 80s. Second, the resolutions were extremely quick. While Russia's default extended over two years (a minor number by historical standards) the other default experiences were solved in under a year. In some cases the default decision was completely avoided.[59]

What was different this time? Probably, a major difference is the depth and complexity of financial markets, with a large number of different players with very different objectives and country risk exposure. While in the 80s all lenders were in the same boat, today there are always fresh and unbruised investors to come in line. Thus, during the 90s there was a much more realistic hope that lending could resume in a very short period of time, an expectation which was not realistic in the 80s. This provided a much stronger incentive at the country level to sort out the problems and implement quickly lasting solutions.

And, in fact, the straightening of economic policy and outcomes has been much improved. Consider Table V.1 that shows the rates of change of key macroeconomic variables for the year before, for the period in which the country is in default, and for the year after default for our case study countries.[60] As can be seen the year before the default is characterized by a loss of reserves, contraction of the financial sector, some exchange rate depreciation, output reduction, fiscal deficits and weak current accounts. During the default period, except for a worsening of the financial crises and an accelerating rate of depreciation, all indicators already improve. The fiscal budget improves, the current account massively turns positive, output starts to recover, and reserves bounce up. These trends tend to consolidate in the post-restructuring scenario. Reserves increase dramatically, deposits start to recover, the exchange rate stabilizes while keeping a strong current account, fiscal account improve further, and output increases rapidly.

[59] Pakistan among our cases. Romania also restructured without actually experiencing a default.

[60] Pakistan has many special features and is excluded from this table. Argentina only appears in the pre default period.

Table V.1. Macroeconomic Developments and Default

	Period		
	Year before	Default	Year after
Reserves (%change)	-7.2	8.4	23.2
Deposits (%change)	-5.6	-6.5	3.0
Exchange Rate (%change)	16.2	66.8	1.0
Output (%change)	-3.7	2.3	8.9
Fiscal Surplus (% GDP)	-2.6	1.0	0.7
Current Account (%GDP)	1.5	10.4	11.3

Thus the table underscores the common pattern associated to the outset of defaults. Unsustainable fixed exchange rate regimes, combined with weak fiscal problems have been important determinants of recent experiences and their correction an important factor in the turnaround. This should not be interpreted as implying that a country with a floating rate would be able to avoid a default if its fiscal policies are inconsistent.[61] The lesson to be learnt from these experiences is that a country with fixed rates may be more vulnerable, both due to balance sheet effects and increased fragility of the financial sector. As of late, one should add the fact that the Fund and other multilaterals have been totally unwilling to support fixed exchange rate regimes recently. All these factors feed into the instability of the situation, acting as a catalyst for the crisis. In any case, it is the combination of fiscal unsustainability and exposed financial sectors what combines to increase the probability of a crisis.

In general the recovery, if considering as starting point the default decision, has been extremely quick. While the recovery is not necessarily the result of the default we cannot disregard that it contributed to such improvement. Does this imply that defaults should be praised as an option for macroeconomic stability? Not necessarily, and for three main reasons. First, the recovery is driven by improved policies, with debt relief contribution probably marginal. In fact the contribution of default to output recovery is likely to be negative, not positive. The violation of property rights, the loss of reputation, and the ensuing implications on consumption and investment are responsible for these effects.[62] Second, once the default decision is taken most of the costs of default have been already paid, particularly its effects in triggering a collapse of the financial sector. The costs of default are paid *ex-ante* and Table V.1 shows that in all episodes these ex-ante costs are found to be extremely large. Third, in the experiences of Table V.1, the IMF has played an important role in aiding the economies to improve policies and have access to financing once a private restructuring (satisfying the demand for PSI) had been implemented. Thus, the better performance may indicate the response of multilaterals to the default decision rather than the balsamic effects of the default. An interesting counterfactual is Argentina. Left alone and without support of the IMF in the post-default decision, it suffered a deep acceleration of its economic crises in the months following the default decision. In the 1st quarter after the default, output collapsed 16.3% relative to a year before.

[61] Neither does this imply that a country with a floating rate cannot suffer a liquidity crunch or a run on its bond market.

[62] Truly enough our econometric result should be conditioned by the fact that the difficulty to re-access capital markets in the 80s after the default decision does not carry through to the experience of the 90s.

The Argentine case is very revealing, because it indicates that the experience that we discussed in this paper may carry little predictive value when looking forward. The evidence from the 80s seems to suggest that if the country is left alone the default hurts rather than helps. In a world with little aid from multilaterals, as may be more likely since the Argentina default, the 80s seems the most appropriate benchmark for comparison. While, we have seen that restructurings may lead to some financial gains on existing debt, the loss of credibility and reputation associated to default indicates that without external help defaults remain a bad deal for the governments. If, on the contrary, the restructuring is associated to a new program with support from the IMF, and somehow the financial crisis associated to the default decision can be minimized, defaults and restructurings can turn out to be a good deal. [63]

Prevention

Needless to say, the best alternative to avoid the mess associated to defaults is for sensible macroeconomic policies: reasonable budgets, relatively low money printing and inflation, and the pursuing of a sensible growth agenda by pursuing deregulation, openness, reasonable tax systems and strong defense of property rights. The proposals discussed in what follows refer to a political scenario that does not allow implementing these first best solutions. Thus, we discuss the lessons for countries which are relatively exposed to default risk, and which do not have the internal consensus to steer course into safer waters.

It is impossible to avoid discussing the implications for defaults of unsustainable exchange rate regimes. The fear of a devaluation, and its sequels through balance sheet effects may trigger a bank run or the moving to a negative equilibrium. In such cases, an early float may be a solution, as long as there is a minimum guarantee that a reasonable level of fiscal balance can be achieved. Needless to say, the discussion on the merits of one or another exchange rate regime goes beyond this particular point. In fact, even in the few cases we have discussed the evidence is mixed. Ecuador, for example, went for full dollarization, while other countries that opted for a more flexible regime. However, if soft pegs are subject to speculative attacks, this risk may be exponentiated under weak fiscal situation and high debt ratios.

A weak point in the link is the banking sector. Having strong prudential regulation is a good initial step, but as proven by the Argentine experience it is not enough to insure stability. The problem with the financial sector is that, either because of internal moral hazard (banks expect to be bailed out), or because they are forced to, the domestic financial sector ends with substantial long positions in the defaulting countries´ debt instruments. Once the government defaults on these instruments, the financial sector is bankrupt. The anticipation of this event triggers a financial crisis prior to the default. Compounded with the balance sheet effects of the devaluation the impact is extremely negative.

[63] For an alternative argument on why countries should pay see Rose (2002).

One solution to this problem is to limit bank's bond holdings. While in most countries government debt is considered among the safest and liquid of assets,[64] this is not the case for near default economies. In those cases it may be a sensible decision to limit bank exposure to default risk as default becomes more imminent. The implementation of this, however, is not trivial if it forces banks to sell its bond holdings in the running up to a default crisis. A clean solution would be to prohibit banks from holding government debt. Of course banks could sell government debt to their clients, but they could not hold it themselves. Thus, default risk would be taken fully by the households or private investors. This is certainly a massive change in banking regulation proposals, and could be restricted to countries without investment grade on their debt holdings.

More involved are the proposals to reduce the balance sheet problem of the financial sector. Countries with the original sin à la Hausmann will likely develop a financial sector that is strongly dollarized and governments will also be forced to issue debt in foreign currency, both to gain credibility and reduce costs. Both factors contribute, to increasing the costs of a devaluation. One alternative is to move towards dollarization as in Ecuador.[65] However, if fiscal accounts remain unbalanced, dollarization risks the monetary anarchy currently in Argentina.[66] In such a context dollarization may be of limited use. Alternatively financial restrictions as in Brazil that do not allow for a dollarized financial sector or as in Chile where an indexed financial unit of account is used may become more prevalent in years to come. While these measures may induce some capital flight if savers insist in holding dollar denominated assets, they may render a more stable financial sector than what is obtained by imposing capital controls at the moment in which the crisis emerges, a pervasive phenomenon in the experiences described in this paper.

Damage Control

If the country cannot avoid the default and eventually gets there, several lessons can be drawn from the recent experiences:

- A country may expect help in the running up to default, but less so if it has a fixed exchange rate which risks transforming aid in capital flight and a bailout to investors. We disagree with Eichengreen and Ruhl (2000) who argue that the no-bail out policies are not time consistent. As debt relief is a repeated game it is relatively easy for IFIs to commit to a no bail out policy.
- So far a country could have expected help for multilaterals in the aftermath of a default. After Argentina that is no longer the case.
- The threat of litigation is less real than expected. This is probably due to the difficulty of upholding strong attachment procedures and the other reasons discussed in Chapter II. However, litigation appears to be very strong in local courts were attachment is much easier. In the end, settlements, bailouts, or court rulings protect local bondholders at the expense of foreign bondholders.

[64] In fact, new Basle rules have started to take this into account, see Castro (2002).
[65] See Levy-Yeyati and Sturzenegger (2002) for a comprehensive discussion of dollarization.
[66] Once debt financing was not available any longer, provinces in Argentina started printing their own currency. As of early 2002 there were about 14 currencies circulating in the country.

- Some debt relief is feasible. Bondholders are atomized, many have already taken their losses and thus are eager to put things behind. The same traders that made it a nightmare while the country was fighting to avoid default will make things easier on the way out. Yet financial gains will be limited unless large haircuts are implemented.
- The use of indexed bonds and growth clauses appears to be a mechanism for generating an automatic co-insurance between the rescheduling country and the creditors. This transfer of risk will carry a price, but as long as related to objective measures we should expect an increase in its use in coming years.
- Defaults should be made as selective as possible. It was silly for Argentina to default on all its instruments when it could have remained current on a number of instruments that carried no payments for years. While the structure of cross default limits the feasibility of this strategy there is ample margin to keep some structure current.
- It is essential to stabilize the financial sector. The largest costs of default are associated to a disruption of the financial sector.

And the international financial system?

A parallel debate to the one discussed in this paper is faced by financial institutions and the governments of the richest countries, which are periodically called upon to aid poorer or crisis countries in need. We will not discuss their decisions and strategies here, as the focus of this paper is on the methodologies and implications of defaults in emerging economies. However, some thoughts on the international financial architecture cannot be avoided.

The realization that defaults have not had the lasting implications suggested by historical evidence, has made both IFIs and rich countries governments more favorably inclined to let countries go if they reach a point of no return. The real change in IFIs position came with the IMF's Russian fiasco. The Fund had supported the Russian stabilization program, even under strong criticism that it was exacerbating moral hazard problems, only to find out that it had used its money to finance the capital outflows of local and international investors. This failure, was such an embarrassment for the IMF that the institution has been extremely cautious to lend again to sustain stabilization programs. In this respect fixed exchange rate regime countries are today at a serious disadvantage relative to floating regimes, for which Fund's aid will be more easily forthcoming, as long as the government can commit to preserving the reserves (remember the row with the IMF over Ukraine's payment to the Regent Group).

After the Russian crisis, the Fund insisted in its strategy of including PSI or Burden Sharing in all its programs,[67] and developed the idea of lending into arrears, i.e. only after default had occurred, as a way of insuring PSI. Alternatively, the IMF may also look favorably to what are referred to as standstills, i.e. capital controls to avoid the exit of private investors, together with a new IMF program geared to reversing expectations.

[67] Roubini (2000) presents a comprehensive discussion of PSI.

The more aggressive role of the IMF has been strengthened by a new Washington administration seeking a more limited role for multilateral organizations. Under this view, multilateral intervention increases the instability of world financial markets, by leading to excessive lending. However, reverting this view by allowing countries to default, and helping them ex-post runs the risk that if these defaults turn out to be less costly they may stimulate further defaults in the future. This may strongly increase the instability of financial markets in the short run. Thus, the focus is probably concentrated today in not bailing out private investors and in making defaults more costly. In reality, the policy is one of maximizing losses for all players.

The relation between multilaterals and the countries remains complex. If the multilaterals aid to easily, they risk incentivating moral hazard problems and promoting unsustainable policies. If they do not help they risk being blamed for a country's collapse. If they help after a default, they risk stimulating further defaults, if they do not help, they risk being responsible for excessively long recessions. [68]

Of course, how they behave depends radically on the country's reaction. In general, the idea is to support reasonable policies and strong fiscal efforts. Thus the support for the stabilization program of Argentina, after the local government had slashed wages and pensions nominally by 13%. However, when effort cannot be distinguished from exogenous negative shocks, multilaterals have recently shown to be more inclined to let the country default (thus revealing a high perceived cost of supporting a failing program) and less urged to help the country resolve its default (thus revealing a high perceived cost of stimulating future defaults).

In this context several proposals for the use of collective action clauses or the development of an international bankruptcy court have been put forward.[69] [70]

There has been ample discussion as to the role of these CAC mechanisms, particularly on the cost of financing. Eichengreen and Mody (2000) show, when comparing New York law and London law bonds (which differ in the ease in which CAC can be used) for solid borrowers, the use of CAC clauses reduces financing costs. For low quality borrowers there is some evidence that they increase financing costs. The result is expected. In fact, the discussion should center on the following question. Default easing characteristics, reduces the costs associated to defaults, thus increasing the overall prospects of the borrower and eventually improving the quality of the instrument. Research on corporate restructurings tends to suggest extremely high costs to litigation. In the case of sovereign lending the costs of protracted negotiations also appear to be large. Yet, default easing instruments also unquestionably increase the probability of default, increasing the incentives to pursue

[68] For investors, the upside potential of each new default was smaller on account of two reasons. First, the market updated recovery values to align them with the better than expected previous experiences while countries were becoming more aggressive (asking for larger discounts) and implementing less clean turnarounds. Thus, while recent defaults have not been devastating for investors, it is not straightforward to suggest that the same pattern will persist in future restructurings.

[69] See Krueger (2002), Rogoff and Zettelmeyer (2001), Roubini (2002) and Taylor (2002).

[70] Roubini (2002) has an extended discussion of the differences in these proposals.

strategic defaults with the ensuing losses to bondholders. How to balance the benefits of having a better instrument and the lower costs of default that may lead to larger incentives to pursue this option leading to higher ex-ante financing costs?

The current advocacy of CACs goes exactly opposite to the objectives of the Brady deal. In the early 90s Brady bonds were made default proof, through the introduction of all sort of clauses: negative pledge provisos, cross acceleration, prohibition to do exchanges under payment default, acceleration clauses, etc. which granted certainty regarding the payment terms. Today a number of economists argue that restructurings should be made easier (rather than more difficult) through the introduction of facilitating conditions. We believe there is by no means evidence at this point to argue in favor of one position or the other.

In the 80s the international financial system bailed out the banks, with the burden paid by the debtor countries and the IFIs. This was wrong, because it led to a decade of isolation. With IFIs pushing countries to default and helping ex-post, in the 2nd half of 90s, investors, countries and IFIs have more evenly shared the cost of poor lending decisions. While this appears to be a better system in terms of equity sharing by reducing the costs of default it also stimulates future ones, anticipating increasing instability in the near future.

Appendix IV: Data.

Argentina

	Deposits	Exchange Rate	Reserves	Money Supply
Ene-96	433.4	1.0	14783.4	12871.9
Feb-96	444.9	1.0	15502.7	12739.8
Mar-96	453.8	1.0	16145.4	12603.3
Abr-96	461.7	1.0	15559.3	12687.9
May-96	471.0	1.0	15702.0	12828.1
Jun-96	476.2	1.0	17313.0	13441.1
Jul-96	476.5	1.0	16029.0	13225.8
Ago-96	474.1	1.0	16311.5	12382.9
Sep-96	481.1	1.0	16855.8	12223.1
Oct-96	483.4	1.0	15665.2	11882.4
Nov-96	488.9	1.0	16516.8	12063.0
Dic-96	498.5	1.0	19714.9	14059.5
Ene-97	518.3	1.0	19117.3	13196.5
Feb-97	520.3	1.0	20127.3	13145.7
Mar-97	533.8	1.0	18787.4	13374.0
Abr-97	548.1	1.0	18602.5	13224.7
May-97	572.2	1.0	20240.5	13447.8
Jun-97	587.5	1.0	20843.8	14043.7
Jul-97	603.6	1.0	20652.9	14528.6
Ago-97	607.6	1.0	20804.1	14309.6
Sep-97	614.8	1.0	20340.1	14203.1
Oct-97	620.2	1.0	20549.8	14233.1
Nov-97	636.5	1.0	20061.4	14213.4
Dic-97	637.6	1.0	22439.4	15974.7
Ene-98	655.9	1.0	21200.6	14725.5
Feb-98	652.4	1.0	21631.9	14605.7
Mar-98	666.5	1.0	21180.2	14521.0
Abr-98	664.6	1.0	21394.5	14723.3
May-98	680.4	1.0	22489.4	14728.4
Jun-98	696.4	1.0	22891.5	15038.2
Jul-98	698.9	1.0	22619.2	15625.1
Ago-98	695.8	1.0	24479.0	15202.8
Sep-98	699.4	1.0	24089.4	14380.6
Oct-98	704.6	1.0	22839.9	14326.7
Nov-98	705.5	1.0	23061.7	14501.4
Dic-98	711.9	1.0	24876.5	16392.2
Ene-99	720.2	1.0	23985.0	14975.2
Feb-99	717.4	1.0	24236.7	14611.8
Mar-99	728.1	1.0	24491.4	14551.2
Abr-99	725.9	1.0	23815.5	14339.8
May-99	735.3	1.0	23494.2	14222.5
Jun-99	750.3	1.0	23106.8	14117.0
Jul-99	749.2	1.0	24292.6	14790.2
Ago-99	752.5	1.0	24081.0	14352.3
Sep-99	761.8	1.0	21887.4	13986.7
Oct-99	758.8	1.0	22520.5	13972.0
Nov-99	774.1	1.0	24614.9	13920.9
Dic-99	757.9	1.0	26373.4	16524.2
Ene-00	770.8	1.0	24411.7	14637.0
Feb-00	774.2	1.0	24773.1	14037.6
Mar-00	779.2	1.0	24698.9	13686.2
Abr-00	780.2	1.0	24794.3	13949.9
May-00	793.9	1.0	23663.8	13575.0
Jun-00	804.4	1.0	25799.6	13810.2
Jul-00	801.2	1.0	26117.1	14348.1
Ago-00	803.2	1.0	24640.6	13679.7
Sep-00	806.9	1.0	24874.3	13613.7
Oct-00	796.5	1.0	23253.5	13401.7
Nov-00	792.3	1.0	22445.3	13377.1
Dic-00	789.1	1.0	25153.5	15077.0
Ene-01	809.1	1.0	25442.9	13896.8
Feb-01	817.3	1.0	25372.6	13747.7
Mar-01	778.5	1.0	21925.9	13679.9
Abr-01	772.6	1.0	20546.9	13338.5
May-01	778.3	1.0	20205.7	13029.3
Jun-01	783.3	1.0	21081.1	21040.9
Jul-01	737.0	1.0	16701.6	18590.1
Ago-01	712.3	1.0	14402.0	16974.4
Sep-01	722.8	1.0	20558.0	18127.7
Oct-01	707.6	1.0	18059.1	16234.1
Nov-01	673.8	1.0	14726.0	15199.9
Dic-01	660.4	1.0	14555.7	17768.5

	GDP	Fiscal Surplus	Current Account
Q1-1996	236566037	-1.9	-3.6
Q2-1996	260751942	-1.1	-0.7
Q3-1996	262166980	-2.1	-2.5
Q4-1996	267020063	-2.6	-3.4
Q1-1997	256387857	-1.9	-4.6
Q2-1997	281769801	-1.3	-2.8
Q3-1997	284092267	-0.8	-4.6
Q4-1997	287515346	-2.0	-4.9
Q1-1998	271702368	-1.7	-6.3
Q2-1998	301207598	-0.5	-3.4
Q3-1998	293315404	-1.6	-5.0
Q4-1998	286267849	-1.8	-5.1
Q1-1999	265024636	-2.8	-5.2
Q2-1999	286412327	-1.6	-2.7
Q3-1999	278472693	-2.3	-4.7
Q4-1999	283566399	-4.7	-4.5
Q1-2000	264555918	-3.0	-4.8
Q2-2000	285275176	-0.4	-2.0
Q3-2000	276767971	-2.2	-3.3
Q4-2000	278091676	-4.0	-2.7
Q1-2001	259199874	-4.5	-4.6
Q2-2001	284795763	-3.0	-1.4

Note: GDP is measured in millions of national currency at 1993 prices. Deposits are measured in millions of national currency at 1995 prices. Money Supply is measured in millions of national currency. Reserves are measured in millions of dollars.

Ecuador

	Deposits	Exchange Rate	Reserves	Money Supply
Ene-96	37.7	2960	1769.1	2978115.2
Feb-96	37.8	2979	1772.8	3345983.0
Mar-96	37.0	3053	1782.4	3566819.9
Abr-96	36.8	3088	1832.6	3528333.3
May-96	37.4	3127	1746.0	3715876.6
Jun-96	37.7	3174	1769.0	3716373.1
Jul-96	37.4	3217	1713.5	3576724.9
Ago-96	36.9	3279	1732.4	3309396.3
Sep-96	36.9	3308	1852.7	3511872.0
Oct-96	37.0	3333	2000.2	3773755.9
Nov-96	35.5	3511	1880.5	3461986.4
Dic-96	35.2	3635	2025.1	4356802.0
Ene-97	33.4	3704	2185.5	3949945.6
Feb-97	32.6	3763	1980.5	3831072.7
Mar-97	32.7	3801	2110.9	4092346.7
Abr-97	32.3	3871	2309.5	4399972.2
May-97	32.1	3912	2409.9	4880493.8
Jun-97	31.7	3989	2453.1	4787438.2
Jul-97	30.6	4045	2333.8	4980689.4
Ago-97	30.4	4108	2267.6	5048485.5
Sep-97	30.6	4142	2424.0	5096068.3
Oct-97	30.5	4264	2308.7	5199265.8
Nov-97	30.3	4329	2291.8	5123371.5
Dic-97	29.6	4428	2259.5	5690112.8
Ene-98	27.8	4527	2108.0	4985041.9
Feb-98	27.3	4551	2147.5	4977565.2
Mar-98	25.3	4887	2127.5	4939339.8
Abr-98	23.4	5076	2224.9	5381778.2
May-98	22.8	5227	2046.4	5477582.4
Jun-98	22.6	5275	1995.6	5370266.5
Jul-98	22.1	5361	2204.7	5401153.9
Ago-98	21.7	5485	1983.6	5383253.3
Sep-98	19.1	6255	1734.6	5176325.3
Oct-98	17.5	6740	1764.8	5329048.4
Nov-98	18.2	6463	1831.4	5422263.1
Dic-98	17.9	6825	1786.4	6872638.5
Ene-99	16.1	7260	1890.5	6527538.6
Feb-99	14.0	9349	1724.0	6712208.0
Mar-99	12.3	10067	1648.5	7859004.9
Abr-99	12.8	9024	1694.4	8316698.9
May-99	12.8	9377	1788.7	8729143.1
Jun-99	11.2	11236	1746.9	8805877.9
Jul-99	10.7	11651	1732.6	9387560.2
Ago-99	11.6	10913	1814.6	8877070.7
Sep-99	10.1	13801	1987.1	10760225.7
Oct-99	8.9	16558	1852.6	12158705.0
Nov-99	8.4	16978	1758.3	12495808.0
Dic-99	7.0	20243	1887.8	18516069.7
Ene-00	5.6	25000	851.9	18793500.0
Feb-00	5.3	25000	909.0	18162500.0
Mar-00	5.0	25000	778.4	19800250.0
Abr-00	4.9	25000	937.8	18571000.0
May-00	5.0	25000	890.0	15986250.0
Jun-00	4.8	25000	891.1	14480750.0
Jul-00	4.8	25000	874.0	13160000.0
Ago-00	4.8	25000	835.0	12896000.0
Sep-00	4.7	25000	1033.6	12680000.0
Oct-00	4.6	25000	1189.1	12371000.0
Nov-00	4.6	25000	1252.7	13127750.0
Dic-00	4.7	25000	1179.7	14740500.0
Ene-01	4.5	25000	970.2	12399250.0
Feb-01	4.6	25000	905.8	12680250.0
Mar-01	4.6	25000	953.5	13534250.0
Abr-01	4.6	25000	1138.2	13985000.0
May-01	4.6	25000	1068.2	13184000.0
Jun-01	4.6	25000	1204.0	13893250.0
Jul-01	4.5	25000	1183.6	15023000.0
Ago-01	4.7	25000	1116.0	14031250.0
Sep-01	4.8	25000	1160.3	13741750.0
Oct-01	4.8	25000	1210.0	14031250.0
Nov-01	4.8	25000	1115.9	15416500.0
Dic-01	4.9	25000	1073.6	15671250.0

	Output	Fiscal Surplus	Current Account
Q1-1996	54206	3.2	3.8
Q2-1996	54327	-0.7	1.5
Q3-1996	55011	-3.9	1.8
Q4-1996	55791	-0.1	4.1
Q1-1997	55788	1.1	3.9
Q2-1997	56597	0.6	-0.3
Q3-1997	57085	-0.5	-1.0
Q4-1997	57279	-6.5	-0.1
Q1-1998	56653	3.0	-2.5
Q2-1998	56699	-1.5	-3.3
Q3-1998	57125	-3.0	-0.6
Q4-1998	57201	2.8	16.3
Q1-1999	53800	-1.6	12.2
Q2-1999	52612	2.2	9.0
Q3-1999	52158	-5.3	10.3
Q4-1999	52560	1.4	20.2
Q1-2000	52433	3.0	23.2
Q2-2000	53720	5.1	18.7
Q3-2000	54494	-4.1	14.6
Q4-2000	55409	-0.1	18.6
Q1-2001	56569	-1.2	17.9
Q2-2001	57262	-1.5	12.9

Note: GDP is measured in millions of national currency at 1993 prices. Deposits are measured in millions of US Dollars at 1995 prices. Money Supply is measured in millions of national currency (Sucres). Reserves are measured in millions of dollars.

Pakistan

	Deposits	Exchange Rate	Reserves	Money Supply
Ene-96	5428.7	34.2	2430.1	340710
Feb-96	5498.1	34.3	2086.8	358947
Mar-96	5463.9	34.4	2381.4	330202
Abr-96	5518.8	34.7	2260.4	350813
May-96	5667.7	34.7	2171.7	316008
Jun-96	5959.1	35.0	2670.0	310081
Jul-96	5872.3	35.2	2491.1	310310
Ago-96	5814.4	35.5	2427.2	304377
Sep-96	5673.2	36.9	1967.8	300489
Oct-96	6039.4	40.0	1367.5	314304
Nov-96	6110.3	40.0	1393.2	329910
Dic-96	6157.0	40.0	1239.3	321058
Ene-97	5996.2	40.0	1412.7	350932
Feb-97	6172.6	40.0	1758.1	351271
Mar-97	6267.1	40.0	1651.1	342153
Abr-97	6123.1	40.1	1588.5	352608
May-97	6279.2	40.3	1766.1	341367
Jun-97	6564.8	40.4	1942.0	347047
Jul-97	6498.0	40.4	2043.2	339824
Ago-97	6561.8	40.4	2207.5	336071
Sep-97	6592.9	40.4	1884.9	332356
Oct-97	6621.7	43.9	2300.0	350447
Nov-97	6770.8	43.9	1976.0	356503
Dic-97	7071.8	43.9	1831.4	367082
Ene-98	7103.4	43.9	1688.4	383607
Feb-98	7285.8	43.9	1780.7	370981
Mar-98	7166.8	43.9	1908.0	372327
Abr-98	7063.8	43.9	2008.7	369062
May-98	7110.0	43.9	1917.3	377197
Jun-98	7096.2	45.9	1460.1	369478
Jul-98	6925.1	45.9	1168.4	381233
Ago-98	6882.4	45.9	1410.3	369096
Sep-98	7032.7	45.9	1292.3	363985
Oct-98	6932.6	45.9	1091.4	386217
Nov-98	6980.7	45.9	1095.5	389964
Dic-98	7109.6	45.9	1645.6	414627
Ene-99	6888.6	46.0	2235.6	421207
Feb-99	6929.5	46.0	2344.0	412059
Mar-99	6866.0	46.0	2266.0	412545
Abr-99	6816.7	46.0	2453.1	406807
May-99	6969.1	51.7	2259.1	407369
Jun-99	7326.3	51.4	2224.0	397983
Jul-99	7154.8	51.2	2133.4	401727
Ago-99	7120.1	51.6	2160.4	398323
Sep-99	7148.5	51.8	2037.2	399370
Oct-99	6972.1	51.8	2146.3	421781
Nov-99	6841.8	51.8	2178.5	444026
Dic-99	7017.5	51.8	2054.5	468491
Ene-00	6952.3	51.8	2102.6	459769
Feb-00	7034.2	51.9	2087.6	449841
Mar-00	6965.7	51.8	2127.0	457449
Abr-00	6999.3	51.8	1991.5	440569
May-00	7173.3	51.8	1880.1	468305
Jun-00	7316.2	51.8	2003.0	497807
Jul-00	7174.6	51.8	1724.1	472609
Ago-00	7251.7	51.8	1806.5	469400
Sep-00	7277.9	58.4	1602.3	468736
Oct-00	7159.9	57.0	1728.5	506903
Nov-00	7067.2	57.5	1915.4	533258
Dic-00	7292.5	58.0	2056.3	458843
Ene-01	7313.2	59.2	1675.4	510314
Feb-01	7351.0	60.3	1593.6	522072
Mar-01	7372.6	60.9	1972.9	487609
Abr-01	7328.8	61.2	1674.1	518714
May-01	7417.1	62.5	1830.7	523934
Jun-01	7839.8	64.1	2683.2	533202
Jul-01	7742.0	64.0	2681.3	524306
Ago-01	7793.3	64.1	2760.4	523086
Sep-01	7658.2	64.2	2712.8	530474
Oct-01	7636.7	62.2	2947.5	546746
Nov-01	7788.5	60.9	3744.8	576159
Dic-01	8108.7	60.9	4234.8	588677

	Output	Fiscal Surplus	Current Account
1990	474.1	-5.4	-4.3
1991	500.0	-7.6	-3.4
1992	539.1	-7.9	-4.0
1993	549.5	-8.9	-6.5
1994	570.9	-7.3	-3.6
1995	600.2	-6.6	-6.1
1996	630.2	-8.0	-8.4
1997	629.6	-7.8	-3.1
1998	645.6	-6.4	-3.9
1999	663.0	-6.9	-1.6
2000	700.4	-5.9	-0.2

Note: GDP is measured in billions of national currency at 1981 prices. Deposits are measured in millions of national currency at 1995 prices. Money Supply is measured in millions of national currency. Reserves are measured in millions of dollars.

Russia

	Deposits	Exchange Rate	Reserves	Money Supply
Ene-96	2717.4	4.7	14740.9	126641
Feb-96	2707.1	4.8	15591.9	131624
Mar-96	2634.7	4.9	19247.8	139918
Abr-96	2586.5	4.9	17220.4	145630
May-96	2633.6	5.0	15073.4	143266
Jun-96	2720.1	5.1	15876.8	157311
Jul-96	2759.7	5.2	15671.1	161627
Ago-96	2788.9	5.4	15506.9	157065
Sep-96	2851.7	5.4	15075.3	156179
Oct-96	2875.2	5.5	14288.0	154290
Nov-96	2873.5	5.5	15519.7	156108
Dic-96	2899.6	5.6	15323.5	164929
Ene-97	2962.5	5.6	13993.0	156197
Feb-97	2959.4	5.7	15207.7	163782
Mar-97	2958.3	5.7	16495.1	171491
Abr-97	2972.3	5.8	18184.3	179870
May-97	2965.8	5.8	20016.1	185978
Jun-97	3014.9	5.8	24548.9	205535
Jul-97	3020.7	5.8	24456.0	207733
Ago-97	3035.2	5.8	23920.1	200825
Sep-97	3141.5	5.9	23100.0	198135
Oct-97	3238.1	5.9	22915.5	200786
Nov-97	3186.0	5.9	16809.9	198757
Dic-97	3327.8	6.0	17783.9	210450
Ene-98	3136.3	6.0	15374.6	187777
Feb-98	3135.5	6.1	15033.7	185321
Mar-98	3135.1	6.1	16858.7	189340
Abr-98	3110.1	6.1	15952.4	191787
May-98	3133.5	6.2	14627.4	193931
Jun-98	3105.2	6.2	16169.0	193796
Jul-98	3034.0	6.2	18408.7	194226
Ago-98	2852.4	7.9	12459.4	186381
Sep-98	2501.9	16.1	12709.1	208782
Oct-98	2317.3	16.0	13572.0	227931
Nov-98	2372.2	17.9	12479.8	238725
Dic-98	2435.0	20.7	12223.0	263675
Ene-99	2338.0	22.6	11620.8	261472
Feb-99	2333.8	22.9	11436.7	270832
Mar-99	2388.8	24.2	10764.9	289178
Abr-99	2421.2	24.2	11168.4	310700
May-99	2480.9	24.4	11936.8	353137
Jun-99	2527.0	24.2	12153.3	362744
Jul-99	2484.8	24.2	11920.6	364857
Ago-99	2547.9	24.8	11231.0	369918
Sep-99	2569.7	25.1	11212.1	364132
Oct-99	2675.8	26.1	11751.7	384562
Nov-99	2834.1	26.4	11504.1	393806
Dic-99	2906.2	27.0	12455.5	439743
Ene-00	3032.0	28.6	12947.7	430684
Feb-00	3215.4	28.7	13657.3	449398
Mar-00	3252.0	28.5	15532.0	490949
Abr-00	3238.2	28.4	17091.4	513774
May-00	3327.7	28.3	19569.9	558447
Jun-00	3398.9	28.1	20996.5	602793
Jul-00	3504.3	27.8	23302.3	654722
Ago-00	3527.7	27.8	23731.0	648192
Sep-00	3681.1	27.8	25007.0	671074
Oct-00	3704.1	27.8	25879.6	662525
Nov-00	3761.8	27.9	27667.4	684170
Dic-00	3847.1	28.2	27972.1	739758
Ene-01	3775.3	28.4	29637.8	683652
Feb-01	3947.4	28.7	28344.8	680175
Mar-01	3886.0	28.7	29708.9	702472
Abr-01	3866.3	28.8	31650.5	717235
May-01	3927.1	29.1	33550.0	741670
Jun-01	3967.9	29.1	35052.6	773645
Jul-01	4032.5	29.3	36501.7	784831
Ago-01	4067.8	29.4	37493.2	808002
Sep-01	4132.4	29.4	37956.9	838078
Oct-01	4228.2	29.7	38002.4	863049
Nov-01	4220.3	29.9	37287.8	836987
Dic-01	4375.7	30.1	36622.2	951294

	Output	Fiscal Surplus	Current Account
Q1-1996	588.8	-6.8	3.8
Q2-1996	622.3	-7.3	1.5
Q3-1996	684.5	-6.0	1.8
Q4-1996	698.7	-6.8	4.1
Q1-1997	575.7	-7.1	3.9
Q2-1997	613.7	-7.5	-0.3
Q3-1997	688.8	-5.5	-1.0
Q4-1997	672.0	-4.5	-0.1
Q1-1998	551.0	-5.6	-2.5
Q2-1998	608.2	-6.5	-3.3
Q3-1998	579.6	-3.2	-0.6
Q4-1998	501.3	-3.8	16.3
Q1-1999	418.0	-2.3	12.2
Q2-1999	492.2	-2.4	9.0
Q3-1999	568.2	-0.1	10.3
Q4-1999	572.5	-0.6	20.2
Q1-2000	562.1	2.1	23.2
Q2-2000	609.0	4.9	18.7
Q3-2000	706.1	2.0	14.6
Q4-2000	656.8	1.1	18.6
Q1-2001	593.6	2.8	17.9
Q2-2001	628.3	4.0	12.9

Note: GDP is measured in billions of national currency at 1997 prices. Deposits are measured in millions of national currency at 1997 prices. Money Supply is measured in millions of national currency. Reserves are measured in millions of dollars.

Ukraine

	Deposits	Exchange Rate	Reserves	Money Supply
Ene-96	3.2	1.9	754.1	3457.3
Feb-96	3.0	1.9	810.5	3590.0
Mar-96	3.0	1.9	638.1	3795.1
Abr-96	2.8	1.8	690.3	3710.2
May-96	2.8	1.8	849.9	3935.5
Jun-96	2.8	1.8	837.7	4122.6
Jul-96	2.8	1.8	1116.1	4170.2
Ago-96	2.9	1.8	1140.7	3932.7
Sep-96	2.7	1.8	1137.1	4418.7
Oct-96	2.7	1.8	1173.8	4237.2
Nov-96	2.7	1.9	1185.0	4359.0
Dic-96	3.0	1.9	1971.6	4974.9
Ene-97	3.0	1.9	1998.7	5386.4
Feb-97	2.9	1.8	2105.0	5419.5
Mar-97	3.0	1.9	2056.3	5352.4
Abr-97	3.0	1.8	2098.2	5707.5
May-97	3.0	1.9	2093.5	5851.2
Jun-97	3.2	1.9	2315.1	6221.6
Jul-97	3.2	1.9	2349.2	6752.4
Ago-97	3.3	1.9	2854.2	7382.1
Sep-97	3.4	1.9	2486.0	6941.0
Oct-97	3.2	1.9	2519.7	6798.1
Nov-97	3.2	1.9	2331.2	6941.2
Dic-97	3.4	1.9	2358.8	7410.6
Ene-98	3.1	1.9	2051.4	6854.8
Feb-98	3.2	2.0	2079.3	6683.9
Mar-98	3.3	2.0	2512.0	7283.7
Abr-98	3.3	2.0	2195.2	7372.4
May-98	3.3	2.1	2065.4	7165.3
Jun-98	3.4	2.1	1765.0	7285.8
Jul-98	3.6	2.1	1661.9	7423.3
Ago-98	3.6	2.3	1225.8	7396.2
Sep-98	4.0	3.4	1076.4	7561.9
Oct-98	3.8	3.4	973.3	7960.9
Nov-98	3.7	3.4	1029.7	8375.5
Dic-98	3.7	3.4	792.9	8639.6
Ene-99	3.5	3.4	632.3	8571.7
Feb-99	3.5	3.6	515.5	8581.4
Mar-99	3.7	3.9	705.4	8748.5
Abr-99	3.8	3.9	675.0	9455.8
May-99	3.9	3.9	786.0	10078.9
Jun-99	4.1	4.0	974.6	10621.4
Jul-99	4.1	4.2	1056.2	10690.9
Ago-99	4.3	4.4	1132.8	11183.0
Sep-99	4.4	4.5	1377.1	11467.9
Oct-99	4.3	4.5	1208.9	11958.9
Nov-99	4.5	4.7	1088.9	11907.1
Dic-99	4.6	5.2	1093.6	12209.2
Ene-00	4.6	5.5	1011.1	12053.0
Feb-00	4.6	5.5	973.1	12488.9
Mar-00	4.7	5.4	1060.1	13009.9
Abr-00	4.6	5.4	912.2	13730.6
May-00	4.9	5.4	974.3	13850.7
Jun-00	5.0	5.4	939.0	14421.9
Jul-00	5.0	5.4	1077.9	15023.1
Ago-00	5.2	5.4	1062.5	15747.7
Sep-00	5.1	5.4	949.3	15148.2
Oct-00	5.1	5.4	1058.7	15343.9
Nov-00	5.2	5.4	1119.3	15891.4
Dic-00	5.4	5.4	1476.4	17561.4
Ene-01	5.3	5.4	1575.9	17133.1
Feb-01	5.4	5.4	1689.2	17228.5
Mar-01	5.6	5.4	1515.7	17471.3
Abr-01	5.5	5.4	1611.6	18103.2
May-01	5.9	5.4	1704.7	18244.3
Jun-01	6.1	5.4	1860.6	19459.8
Jul-01	6.2	5.4	2034.9	19656.7
Ago-01	6.3	5.3	2208.0	20838.6
Sep-01	6.4	5.3	2722.9	20807.0
Oct-01	6.6	5.3	2953.7	22152.1
Nov-01	6.6	5.3	3005.5	22355.7
Dic-01	7.0	5.3	3089.5	25033.7

	Output	Fiscal Surplus	Current Account
Q1-1996	17.2	-6.2	-2.2
Q2-1996	16.5	-4.1	0.3
Q3-1996	17.3	-2.9	-0.1
Q4-1996	17.4	-5.3	-1.3
Q1-1997	15.4	-5.6	-1.8
Q2-1997	17.1	-5.5	-0.6
Q3-1997	18.3	-10.8	-0.4
Q4-1997	18.3	-6.3	-0.3
Q1-1998	15.6	-6.6	-1.6
Q2-1998	16.2	-3.7	-0.7
Q3-1998	17.0	-0.3	-1.1
Q4-1998	18.1	0.8	0.6
Q1-1999	14.6	-0.8	-1.3
Q2-1999	15.4	-1.6	5.9
Q3-1999	17.9	-1.1	1.6
Q4-1999	17.8	-2.1	0.0
Q1-2000	15.6	2.8	-0.7
Q2-2000	16.0	-1.1	1.8
Q3-2000	17.8	2.6	3.4
Q4-2000	18.7	0.5	1.0
Q1-2001	17.7	3.5	0.9
Q2-2001	18.5	0.9	1.8

Note: GDP is measured in billions of national currency at 1990 prices. Deposits are measured in millions of national currency at 1995 prices. Money Supply is measured in millions of national currency. Reserves are measured in millions of dollars.

References

Ades, A., F. Kaune, P. Leme, R. Masih and D. Tenengauzer (2000). A New Framework for Assessing Fair Value in Emerging Markets Hard-Currency Debt. Global Economics. Paper No. 45. June 2000.

Bank of Russia (1998). Annual Report, Moscow.

Barro, R. (1991). Economic Growth in a Cross Section of Countries. Quarterly Journal of Economics. May, pp.407-443.

Becker, T., A. Richards and Y. Thaicharoen (2001). Bond Restructuring and Moral Hazard: Are Collective Action Clauses Costly? Mimeo.

Buchheit, L. and G. Mitu Gulati (2000). Exit Consensus in Sovereign Bond Exchanges. UCLA, Law Review, Vol. 48, Number 1.

Buchheit, L. (1990). The Background to Brady's Initiative. International Financial Law Review, April 1990.

Buchheit, L. (1995). The Sovereign Client. Journal of International Affairs, Winter Vol. 48, No. 2.

Buchheit, L. (1997). US Cases Put Immunity of Second Tier State Entities in Doubt. International Financial Law Review, June 1997.

Buchheit, L. (1998a). Majority Action Clauses May Help Resolve Debt Crises. International Financial Law Review, August 1998.

Buchheit, L. (1998b). Changing Bond Documentation: the Sharing Clause. International Financial Law Review, July 1998.

Buchheit, L. (1998c). The Collective Representation Clause. International Financial Law Review, September 1998.

Buchheit, L. (2000). How Ecuador Escaped the Brady Bond Trap. International Financial Law Review, December 2000.

Burki, S. J. (2000). Crisis in Pakistan: A Diagnosis of its Causes and an Economic Approach to Resolving It in Changing Perceptions and Altered Reality: Emerging Economies in the 1990s. The World Bank. January 2000.

Calvo, G., A. Izquierdo and E. Talvi (2002). Suden Stops, the Real Exchange Rate and Fiscal Sustainability: Argentina's Lessons. Background paper for the seminar The Resurgence of Macro Crises: Causes and Implications for Latin America. Fortaleza,

Brazil. Annual Meetings of the Board of Governors, Inter-American Development Bank and Inter-American Investment Corporation. March 11, 2002.

Castro, C. (2002). Aplicación del enfoque IRB para el sistema financiero argentino utilizando datos de la Central de Deudores. Mimeo, BCRA.

Cespedes, L.F., R. Chang and A. Velasco (2000). Balance Sheets and Exchange Rate Policy , NBER Working Paper No. W7840, August 2000.

Chang R. and A. Velasco (1998a). Financial Crises in Emerging Markets, NBER Working Paper No. W6606, June 1998.

Chang R. and A. Velasco (1998b). Financial Fragility and the Exchange Rate Regime, NBER Working Paper No. W6469, March 1998.

Chang R. and A. Velasco (1999). Liquidity Crisis in Emerging Markets: Theory and Policy, NBER Working Paper No. W7272, July 1999.

Deutsche Bank, Dornbusch, R. and M. Draghi (1990). Public Debt Management: Theory and History, Cambridge University Press.

Duffie, D., L. H. Pedersen and K. J. Singleton (2000). Modeling Sovereign Yield Spreads: A Case Study of Russian Debt. Mimeo.

Edwards, S. (2001). Does the Current Account Matter? Prepared for the NBER's conference on Crisis Prevention. Florida, USA, January 2001.

Eichengreen, B. and A. Mody (2000). Would Collective Action Clauses Raise Borrowing Costs? An Update and Additional Results. University of California, Berkeley. Center for International and Development Economics Research (CIDER). Working Paper Series. C00-114. May 2000.

Eichengreen, B. and C. Rühl (2000). The Bail-In Problem: Systematic Goals, Ad Hoc Means. NBER, Working Paper 7653.

Fischer, S. (2000). Ecuador and the IMF. Hoover Institution Conference on Currency Unions, Palo Alto, California, May 2000.

Floria, C. and C. García Belsunce (2001). Historia de los Argentinos. Ediciones Larousse.

Glick, R. and M. Hutchison (1999). Banking and Currency Crises: How Common are Twins? Pacific Basin Working Paper Series, Working Paper PB99-07.

Global Development Finance, The World Bank, 1999.

Gulati, G. and K. Klee (2001). Sovereign Piracy. UCLA, School of Law. Research Paper No. 01-7.

Hausmann R. and A. Velasco (2002). The Argentine Collapse: Hard Money's Soft Underbelly. Kennedy School of Government, Harvard University, April 2002.

International Monetary Fund. Pakistan and the IMF, Peru and the IMF.

Jarrow, R., D. Lando and S. Turnbull (1997). A Markov Model for the Term Structure of Credit Spreads. Review of Financial Studies, 10, 1997.

JPMorgan (1997). Russia: Vnesh Closing Now Expected Mid-November.

JPMorgan (2000). Russia: A Rough Guide to the Prin/IAN Exchange for 2010 & 2030 Eurobonds.

Kaminsky G. L. and C. Reinhart (1999). The Twin Crises: The Causes of Banking and Balance-of-Payments Problems. The American Economic Review 89(3), 473-500.

Kharas, H., B. Pinto and S. Ulatov (2001). An Analysis of Russia's 1998 Meltdown: Fundamentals and Market Signals. Brookings Papers on Economic Activity. No. 1. 2001.

Krueger, A. (2002). New Approaches to Sovereign Debt Restructuring: An Update on Our Thinking. Conference on Sovereign Debt Workouts: Hopes and Hazards. Institute for International Economics, Washington D.C., April 1, 2002.

Lipworth, G. and J. Nystedt (2001). Crisis Resolution and Private Sector Adaptation. IMF Staff papers, Vol.47.

Merrick, J.J. Jr.(1999). Crisis Dynamics of Implied Default Recovery Ratios: Evidence From Russia and Argentina. New York University, Leonard N. Stern School of Business, Finance Department Working Paper Series.

NUPI, Centre for Russian Studies. Chronology of Events (from 1995 to 2002).

Özler, S. (1992). The Evolution of Credit Terms: An Empirical Study of Commercial Bank Lending to Developing Countries. Journal of Development Economics, Vol.38, No.1.

Özler, S. (1993). Have Comercial Banks Ignored History? The American Economic Review, Vol.83, No. 3.

Perry, G. and L. Servén (2002). The Anatomy of a Multiple Crisis: Why was Argentina Special and What Can We Learn form It. Chief Economist Office, LAC. The World Bank. May 19, 2002.

Peru's Finance Ministry and Peru's Central Bank. Memorándum de Políticas Económicas y Financieras del Gobierno del Perú para el Período 1 Abril 1999 al 31 Marzo 2002.

Powell, A. (2002). The Argentine Crisis: Bad Luck, Bad Economics, Bad Politics, Bad Advice? Universidad Torcuato Di Tella. Paper prepared for Brookings Trade Conference, May 2, 2002, Washington D.C..

Powell, A. and F. Sturzenegger (2002). Dollarization: The Link Between Devaluation Risk and Default Risk, in E. Levy-Yeyati and F. Sturzenegger eds., Dollarization, forthcoming MIT Press.

Rogoff, K. and J. Zettelmeyer (2001). Early Ideas on Sovereign Bankruptcy Reorganization: A Survey. IMF Working Paper 02/57, March.

Rojas-Suarez, L. and P. Ghezzi (2000). Latin America. Current Accounts: Can They Achieve Sustainability? Global Markets Research. Emerging Markets. Deutsche Bank. March 22, 2000.

Rose, A. (2002). One Reason Countries Pay Their Debts: Renegotiation and International Trade. NBER, Working Paper 8853.

Roubini, N. (2002). Do We Need a New International Bankruptcy Regime? Comments on Bulow, Sachs and White. Mimeo.

Roubini, N. (2000). Bail-In, Burden-Sharing, Private Sector Involvement (PSI) in Crisis Resolution and Constructive Engagement of the Private Sector. A Primer: Evolving Definitions, Doctrine, Practice and Case Law. Mimeo.

Sosa Navarro, R. (2002). Estimaciones de Tasas de Recupero y Probabilidades de Cesación de Pagos para Bonos Argentinos. Crisis Financiera Diciembre 2001. Mimeo, Universidad Torcuato Di Tella.

Taylor, J. (2002). Sovereign Debt Restructuring: A U.S. Perspective. Remarks at Conference on Sovereign Debt Workouts: Hopes and Hazards. Institute for International Economics, Washington D.C., April 1, 2002.

UEPLAC, Ukrainian-European Policy and Legal Advice Centre. Ukrainian Economic Trends (1999-2001).

Universidad Torcuato Di Tella, Business School Working Papers

Working Papers 2003

Nº16 "*Business Cycle and Macroeconomic Policy Coordination in MERCOSUR*"
Martín Gonzalez Rozada (UTDT) y **José Fanelli** (CEDES).
Nº15 *"The Fiscal Spending Gap and the Procyclicality of Public Expenditure"*
Eduardo Levy Yeyati (UTDT) y **Sebastián Galiani** (UDESA).
Nº14 *"Financial Dollarization and Debt Deflation under a Currency Board"*
Eduardo Levy Yeyati (UTDT), **Ernesto Schargrodsky** (UTDT) y **Sebastián Galiani** (UDESA).
Nº13 *"¿ Por qué crecen menos los regímenes de tipo de cambio fijo? El efecto de los Sudden Stops",* **Federico Stuzenegger** (UTDT).
Nº12 *"Concentration and Foreign Penetration in Latin American Banking Sectors: Impact on Competition and Risk",* **Eduardo Levy Yeyati** (UTDT) y **Alejandro Micco** (IADB).
Nº11 *"Default`s in the 1990`s: What have we learned?",*
Federico Sturzenegger (UTDT) y **Punan Chuham** (WB).

Nº10 *"Un año de medición del Indice de Demanda Laboral: situación actual y perspectivas",*
Victoria Lamdany (UTDT) y **Luciana Monteverde** (UTDT)

Nº09 *"Liquidity Protection versus Moral Hazard: The Role of the IMF",*
Andrew Powell (UTDT) y **Leandro Arozamena** (UTDT)
Nº08 *"Financial Dedollarization: A Carrot and Stick Approach",* **Eduardo Levy Yeyati** (UTDT)
Nº07 *"The Price of Inconvertible Deposits: The Stock Market Boom during the Argentine crisis",*
Eduardo Levy Yeyati (UTDT), **Sergio Schmukler** (WB) y **Neeltje van Horen** (WB)
Nº06 *"Aftermaths of Current Account Crisis: Export Growth or Import Contraction?",*
Federico Sturzenegger (UTDT), **Pablo Guidotti** (UTDT) y **Agustín Villar** (BIS)
Nº05 *"Regional Integration and the Location of FDI",*
Eduardo Levy Yeyati (UTDT), **Christian Daude** (UM) y **Ernesto Stein** (BID)
Nº04 *"A new test for the success of inflation targeting",*
Andrew Powell (UTDT), **Martin Gonzalez Rozada** (UTDT) y **Verónica Cohen Sabbán** (BCRA)
Nº03 *"Living and Dying with Hard Pegs: The Rise and Fall of Argentina´s Currency Board",*
Eduardo Levy Yeyati (UTDT), **Augusto de la Torre** (WB) y **Sergio Schmukler** (WB)
Nº02 *"The Cyclical Nature of FDI flows",*
Eduardo Levy Yeyati (UTDT), **Ugo Panizza** (BID) y **Ernesto Stein** (BID)

Nº01 *"Endogenous Deposit Dollarization",*
Eduardo Levy Yeyati (UTDT) y **Christian Broda** (FRBNY)

Working Papers 2002

Nº15 *"The FTAA and the Location of FDI",*
Eduardo Levy Yeyati (UTDT), **Christian Daude** (UM) y **Ernesto Stein** (BID)
Nº14 *"Macroeconomic Coordination and Monetary Unions in a N-country World: Do all Roads Lead to Rome?"*
Federico Sturzenegger (UTDT) y **Andrew Powell** (UTDT)
Nº13 *"Reforming Capital Requirements in Emerging Countries"*
Andrew Powell (UTDT), **Verónica Balzarotti** (BCRA) y **Christian Castro** (UPF)
Nº12 *"Toolkit for the Analysis of Debt Problems",* **Federico Sturzenegger** (UTDT)
Nº11 *"On the Endogeneity of Exchange Rate Regimes",*
Eduardo Levy Yeyati (UTDT), **Federico Sturzenegger** (UTDT) e **Iliana Reggio** (UCLA)
Nº10 *"Defaults in the 90´s: Factbook and Preliminary Lessons",* **Federico Sturzenegger** (UTDT)
Nº09 *"Countries with international payments´ difficulties: what can the IMF do?"*
Andrew Powell (UTDT)
Nº08 *"The Argentina Crisis: Bad Luck, Bad Management, Bad Politics, Bad Advice",*
Andrew Powell (UTDT)
Nº07 *"Capital Inflows and Capital Outflows: Measurement, Determinants, Consequences",*
Andrew Powell (UTDT), **Dilip Ratha** (WB) y **Sanket Mohapatra** (CU)
Nº06 *"Banking on Foreigners: The Behaviour of International Bank Lending to Latin America, 1985-2000",*
Andrew Powell (UTDT), **María Soledad Martinez Peria** (WB) y **Ivanna Vladkova** (IMF)
Nº05 *"Classifying Exchange Rate Regimes: Deeds vs. Words"*
Eduardo Levy Yeyati (UTDT) y **Federico Sturzenegger** (UTDT)
Nº04 *"The Effect of Product Market Competition on Capital Structure: Empirical Evidence from the Newspaper Industry",* **Ernesto Schargrodsky** (UTDT)
Nº03 *"Financial globalization: Unequal blessings",*
Augusto de la Torre (World Bank), **Eduardo Levy Yeyati** (Universidad Torcuato Di Tella) y **Sergio L. Schmukler** (World Bank)
Nº02 *"Inference and estimation in small sample dynamic panel data models"*,
Sebastian Galiani (UdeSA) y **Martin Gonzalez-Rozada** (UTDT)
Nº01 *"Why have poverty and income inequality increased so much? Argentina 1991-2002"*,
Martín González-Rozada, (UTDT) y **Alicia Menendez**, (Princeton University).